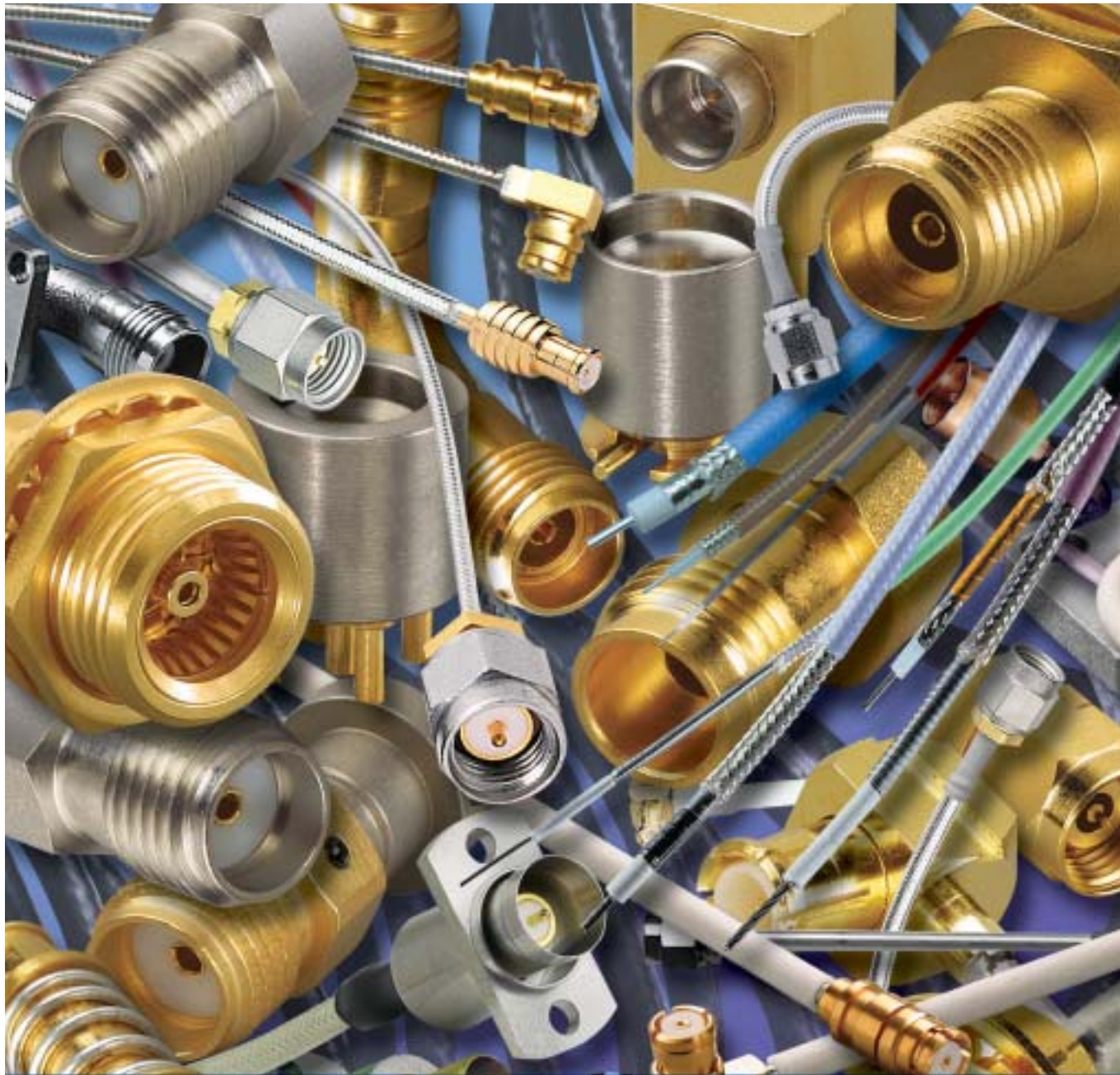


# RF/Microwave Products

Connectors, Cables and Assemblies

## Tensolite



A **CARLISLE** Company

# Introduction



Tensolite is your reliable resource for high performance interconnect products. Long appreciated for quality and service, the products in this catalog display the wide range available to choose from for next generation systems.

Vertical integration and extensive manufacturing capabilities ensure that quality, always the primary consideration, and on-time delivery are never compromised.

Our manufacturing plants are constantly upgrading equipment and services. Our staff is expert at accommodating clients and creating fresh solutions. More than simply providing parts, Tensolite takes pride in bringing innovative solutions to the table. Our skilled staff provides





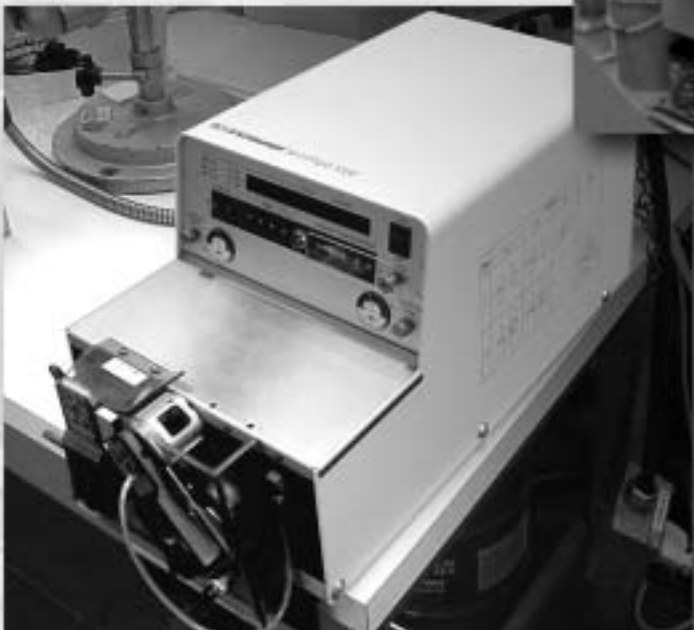
recommendations to meet specific electrical/mechanical parameters or improve product design.

Plants are reconfigured as needed without interfering with work flow. Flexibility from engineering to manufacturing is key to efficiency and rapid turn around.

Tensolite provides in-process testing to measure characteristic impedance, capacitance, dielectric withstanding voltage and time delay mismatch.

Tensolite, a leader in high performance, quality products is the resource you can depend on to get what you want, when you want it.

For more information on products and services be sure to visit [Tensolite.com](http://Tensolite.com) to see our newest products and download technical material.



# Contents

<b>Connector Index</b> .....	4, 5
<b>SMA Series</b>	
SMA Semi-Rigid Cable Connectors .....	9-12
SMA Phase Adjustable SMA Connector .....	13
SMA Semi-Rigid Cable Receptacles .....	14
SMA Flexible Cable Connectors .....	15, 16
SMA Bulkhead & Panel Mount Solder Pot Terminations .....	17-20
SMA Bulkhead & Panel Mount Straight Terminations .....	21-23
SMA Bulkhead & Panel Mount Slotted Terminations .....	24-28
SMA Bulkhead & Panel Mount Tab Terminations .....	29-32
SMA Bulkhead & Panel Mount Female Contact Terminations (Field Replaceables) .....	33-35
SMA Bulkhead & Panel Mount Female Contact Terminations .....	36, 37
SMA EMI/RFI Gaskets .....	37
SMA Solder and Braze-in Hermetic Seal .....	37
SMA Bulkhead & Panel Mount Hermetically Sealed Connectors .....	38, 39
SMA Strip Transmission Line Terminations .....	39-41
SMA Microstrip Transmission Line Terminations .....	42, 43
<b>BMA Series</b>	
BMA Panel Mount .....	47, 48
BMA Flange Mount .....	49
BMA Bulkhead Mount .....	49
<b>SSMA Series</b>	
SSMA Adapters .....	53
SSMA Cable Connectors .....	53, 54
SSMA Bulkhead & Panel Mount .....	54
<b>SMP Series</b>	
SMP In-Series Adapters .....	59, 60
SMP Field Replaceable Connectors .....	61
SMP Cable Connectors .....	62
SMP Semi-Rigid Cable Connectors .....	63-65
SMP Right Angle Cable Connectors .....	66
SMP Straight Cable Connectors .....	67
SMP Caps, Shorts, Opens and Loads .....	67
SMP Loads & Terminations .....	68
SMP Panel Mount Connectors .....	69
SMP Circuit Board Connectors .....	69-71
SMP Hermetics .....	72-74
SMP Shrouds .....	75, 76
SMP Surface Mount Connectors .....	77, 78
<b>SSMP Series</b>	
SSMP In-Series Adapters .....	83
SSMP Semi-Rigid Cable Connectors .....	83, 84
SSMP Circuit Board Connectors .....	84
SSMP Hermetics .....	85
SSMP Shrouds .....	85
SSMP Surface Mount Connectors .....	85, 86
SSMP Terminations .....	86

<b>MCX Series</b>	
MCX Cable Connectors .....	91, 92
<b>SMK 2.92mm Series</b>	
SMK 2.92mm Cable Connectors Semi-Rigid/Semi-Flex .....	97
SMK 2.92mm Field Replaceable Connectors .....	98
SMK 2.92mm Flange Mount .....	99
SMK 2.92mm Spark Plug .....	99
SMK 2.92mm In-Series Adapters .....	100
SMK 2.92mm Straight Adapters .....	101
<b>I.85mm Series</b>	
I.85mm Adapters .....	105
I.85mm Field Replaceable .....	106
I.85mm Cable Connector .....	106, 107
<b>Type N Series</b>	
Type N Connectors .....	111-113
<b>TNC Series</b>	
TNC Connectors .....	117-119
TNC Connectors In-Series Adapters .....	120
<b>Adapters</b>	
Adapters SMA / Phase Shifter .....	123-126
Adapters SMP .....	127-130
Adapters SSMP .....	131-133
Adapters Type N Between Series .....	134-137
Adapters Type N In-Series Adapters .....	138, 139
<b>QBC Quality Blind Mate Connector</b> .....	140-145
<b>RF Microwave Standard Assemblies</b>	
Q-Flex Series .....	147, 148
Q-Flex Plus Series .....	149
Semi-Flex Series .....	150-152
Semi-Flex Plus Series .....	153
Semi-Flex II Series .....	154
Workhorse Series .....	155
Workhorse Plus Series .....	156
Low Loss Workhorse Series .....	157
Armored Workhorse Series .....	158
Low Cost, Low Loss Series .....	159
Workhorse 40 Series .....	160
TS1818 & TS7878 Series .....	161
TS Series Technical Data .....	162
Semi-Rigid Cable Assemblies .....	163
Delay Lines .....	164
Peltola Interconnect System .....	165, 166
Low Loss Flexible (LLF Series cable Summary) .....	167-169
MIL-C-17 Flexible Coaxial Cables .....	170
MIL-C-17 Semi-Rigid Coaxial Cables .....	171
Acculite .....	172
<b>Assembly Instructions</b>	
Assembly Instructions Contents .....	175
Assembly Instructions .....	174-235



# Connector Index

1345	.....37	5170	.....124	5424	.....18	5680	.....*33
1604	.....37	5191	.....123	5430	.....18	5681	.....*33
200	.....97	5205	.....25	5432	.....18	5683	.....*33
201	.....97	5206	.....25	5450	.....23	5684	.....*33
219	.....99	5208	.....25	5460	.....30	5685	.....*33
220	.....100	5209	.....25	5461	.....30	5686	.....*33
221	.....100	5210	.....17	5490	.....123	5687	.....*33
222	.....100	5211	.....18	5530	.....36	5691	.....22
223	.....100	5220	.....21	5580	.....26	5692	.....32
224	.....101	5224	.....10	5581	.....26	5694	.....32
225	.....101	5225	.....11	5595	.....26	5698	.....25
226	.....101	5228	.....11	5596	.....26	5700	.....25
227	.....99	5229	.....11	5601	.....*33	5704	.....32
228	.....99	5230	.....26	5602	.....*34	5706	.....32
229	.....98	5235	.....12	5603	.....*34	5710	.....25
230	.....98	5236	.....12	5604	.....*34	5712	.....25
231	.....98	5240	.....40	5605	.....*34	5714	.....*35
240	.....99	5246	.....39	5606	.....*34	5715	.....*33
3-M097-716-11	.....92	5250	.....32	5607	.....*34	5716	.....*33
3-M690-816-10	.....91	5251	.....32	5608	.....*34	5717	.....*33
3-M790-317-10	.....92	5260	.....17	5609	.....*34	5718	.....*33
3-M790-816-10	.....92	5263	.....24	5611	.....19	5720	.....15
3-M797-617-10	.....92	5267	.....21	5612	.....19	5721	.....15
3-M797-790-10	.....91	5268	.....24	5614	.....31	5730	.....15
3-M797-890-10	.....91	5270	.....17	5615	.....31	5733	.....15
3001	.....53	5271	.....29	5617	.....23	5734	.....*35
3002	.....53	5273	.....21	5618	.....23	5750	.....16
3004	.....54	5276	.....29	5623	.....31	5752	.....16
3005	.....54	5277	.....17	5624	.....31	5760	.....24
3035	.....54	5280	.....41	5626	.....27	5761	.....24
3052	.....53	5285-0-4	.....10	5627	.....27	5762	.....29
3053	.....53	5285	.....9	5629	.....27	5763	.....30
3065	.....54	5286	.....10	5630	.....27	5780	.....*33
4004	.....37	5289	.....10	5631	.....36	5785	.....14
5004	.....135	5293	.....20	5632	.....36	5786	.....14
5006	.....135	5294	.....22	5633	.....*33	5787	.....14
5008	.....136	5295	.....20	5634	.....*34	5790	.....14
5009	.....136	5299	.....124	5635	.....*34	5791	.....14
5010	.....136	5308	.....42	5642	.....18	5792	.....14
5012	.....136	5309	.....42	5643	.....18	5793	.....14
5013	.....137	5317	.....9	5645	.....31	5794	.....14
5014	.....126	5319-01	.....9	5646	.....31	5801	.....28
5015	.....126	5320	.....40	5648	.....23	5802	.....28
5016	.....126	5319-1SF	.....9	5649	.....23	5803	.....23
5017	.....126	5319	.....9	5651	.....31	5810	.....14
5018	.....125	5339	.....17	5652	.....31	5811	.....14
5027	.....134	5340	.....21	5654	.....27	5812	.....14
5028	.....134	5341	.....22	5655	.....27	5813	.....14
5029	.....134	5343	.....32	5657	.....27	5814	.....14
5030	.....134	5344	.....32	5658	.....27	5815	.....14
5032	.....21	5348	.....29	5659	.....36	5816	.....14
5033	.....137	5350	.....24	5660	.....36	5817	.....14
5034	.....137	5352	.....29	5663	.....*34	5818	.....14
5035	.....137	5355	.....24	5664	.....*34	5819	.....14
5039	.....135	5357	.....29	5665	.....*34	5820	.....14
5040	.....135	5361	.....40	5666	.....*34	5821	.....14
5065	.....123	5390	.....123	5668	.....*34	5822	.....14
5110	.....19	5411	.....41	5669	.....*34	5823	.....14
5111	.....19	5416	.....41	5674	.....*33	5824	.....14
5130	.....19	5420	.....28	5675	.....*33	5850	.....11
5135	.....124	5421	.....28	5678	.....*34	5851	.....16
5161	.....12	5423	.....23	5679	.....*34	5860	.....42

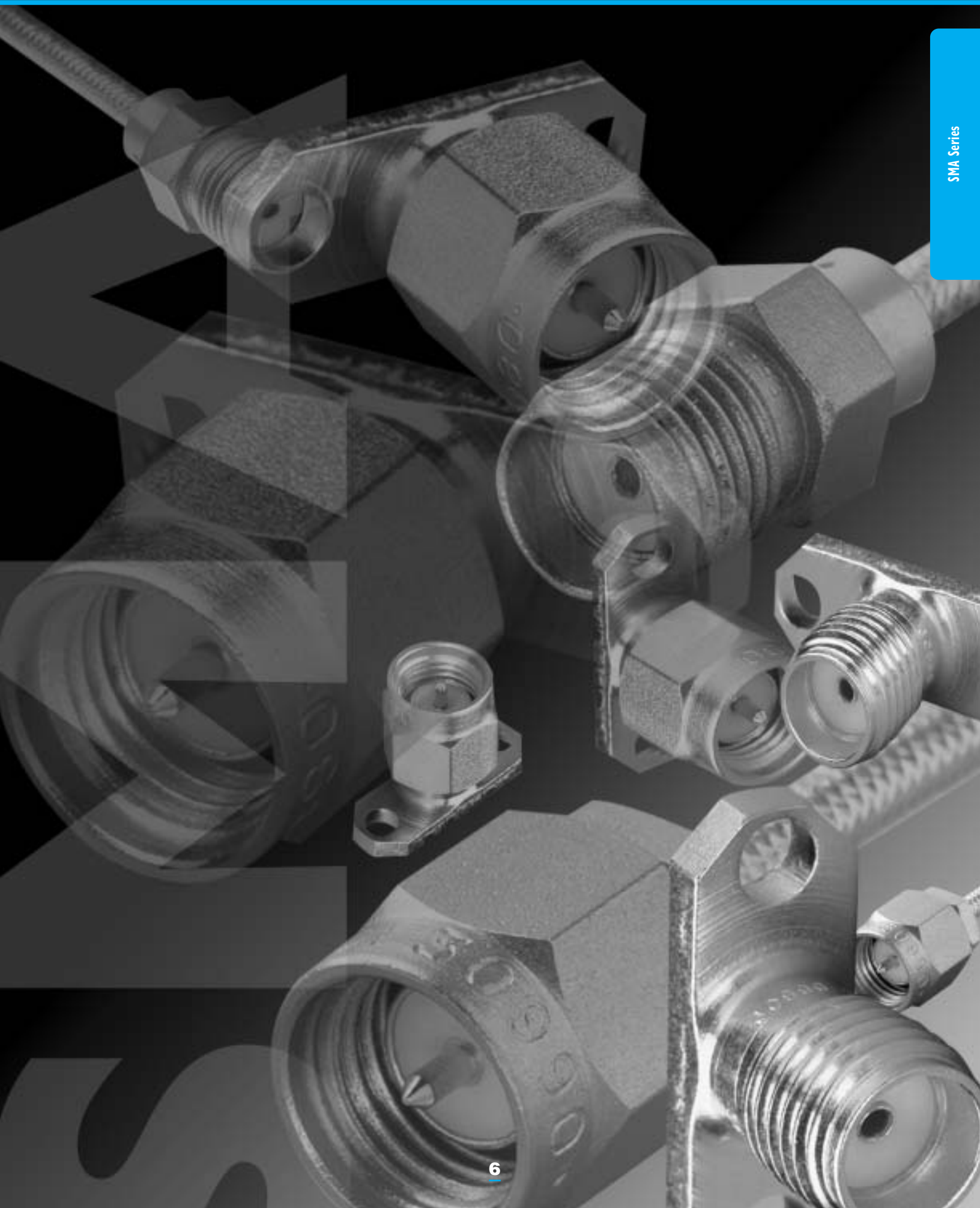
# Connector Index

5861	.42	8089	.112	P658	.64	P913	.130
5866	.43	8090	.112	P659	.65	P914	.60
5867	.43	8091	.113	P660	.63	P916	.60
5868	.43	9009	.117	P661	.67	P918	.68
5869	.43	9010	.117	P662	.64	P919	.68
5880	.30	9011	.117	P663	.67	P920	.130
5881	.30	9012	.117	P664	.64	P922	.60
5890	.22	9028	.119	P665	.66	P930	.68
5901	.23	9030	.118	P666	.64	P931	.68
5902	.36	9031	.118	P667	.67	V200	.106
5921	.21	9032	.118	P670	.75	V202	.106
5922	.29	9034	.118	P671	.75	V203	.105
5923	*33	9042	.119	P672	.75	V204	.105
5924	.17	9045	.119	P673	.75	V205	.105
5925	*33	9050	.120	P674	.69	V206	.105
5926	.24	9051	.120	P675	.76	V208	.106
5930	.29	9052	.120	P676	.76	V213	.106
5934	.24	9080	.119	P677	.77	V214	.107
5935	*33	P101	.83	P678	.69		
5936	*33	P105	.83	P680	.72		
5937	*35	P107	.83	P681	.72		
5938	*35	P109	.86	P682	.72		
5941	*34	P110	.86	P683	.74		
5942	*34	P122	.85	P695	.71		
5961	.38	P123	.131	P696	.71		
5962	.38	P124	.131	P698	.71		
5964	.38	P125	.131	P702	.77		
5967	.38	P126	.131	P703	.77		
5971	.39	P127	.132	P722	.65		
5972	.39	P128	.132	P723	.65		
5980	*35	P129	.132	P739	.76		
5981	*35	P130	.132	P757	.77		
5982	*35	P138	.83	P761	.74		
5983	*35	P139	.133	P769	.76		
5998	.125	P141	.133	P775	.78		
5999	.13	P148	.84	P786	.72		
610	.47	P154	.85	P790	.73		
611	.47	P156	.84	P794	.73		
621	.49	P203	.85	P797	.78		
622	.49	P303	.84	P802	.127		
623	.48	P308	.85	P819	.127		
624	.48	P310	.86	P823	.127		
640	.48	P311	.86	P825	.127		
641	.48	P319	.84	P834	.69		
642	.49	P600	.62	P835	.61		
643	.49	P601	.62	P836	.61		
644	.47	P602	.69	P837	.61		
645	.47	P603	.70	P838	.78		
8009	.111	P604	.66	P839-	.78		
8010	.111	P606	.70	P840	.73		
8011	.111	P617	.59	P902	.128		
8012	.111	P629	.63	P903	.128		
8020	.138	P634	.63	P904	.128		
8028	.139	P646	.70	P905	.128		
8029	.139	P650	.59	P906	.129		
8030	.139	P651	.63	P907	.129		
8036	.138	P652	.65	P908	.129		
8037	.138	P654	.70	P909	.129		
8038	.138	P655	.66	P910	.130		
8041	.112	P656	.71	P911	.130		
8080	.112	P657	.67	P912	.59		

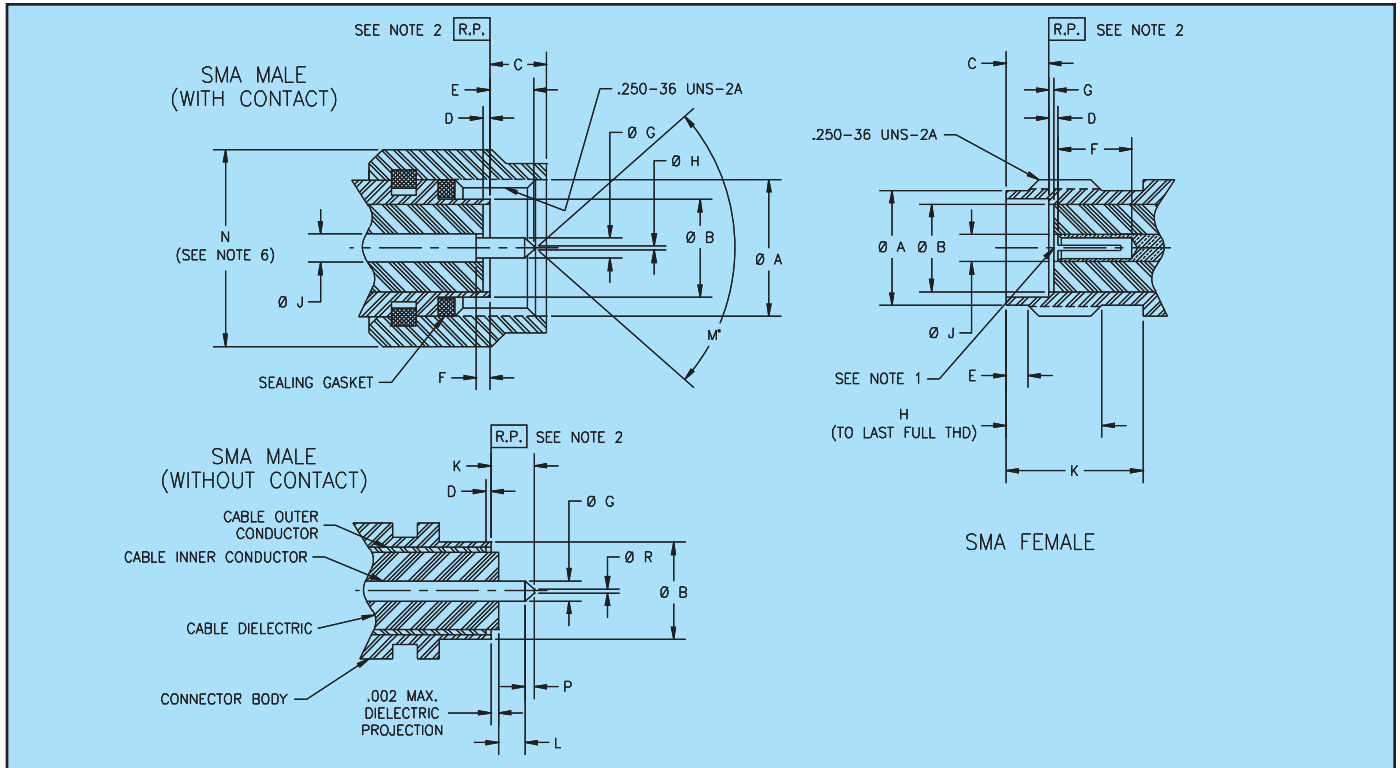


# SMA Series

SMA Series



# SMA Interface Mating Dimensions (Per MIL-STD-348)



## MALE

## FEMALE

LTR	Inches/Millimeters <sup>3</sup>					
	Minimum		Nominal		Maximum	
	in.	mm	in.	mm	in.	mm
∅A	.250	6.35	.263	6.68	—	—
∅B	—	—	.1790	4.55	.1808	4.59
C	—	—	.117	2.97	.135	3.43
D <sup>4</sup>	.000	0.00	-.005	-0.13	-.010	-0.25
E	.065	1.65	.085	2.16	.100	2.54
F <sup>5</sup>	.000	0.00	-.005	-0.13	-.010	-0.25
∅G	.0355	0.90	.0360	0.91	.0370	0.94
∅H	.000	0.00	.010	0.25	.012	0.30
∅J	.049	1.24	.050	1.27	.051	1.30
K	—	—	—	—	.100	2.54
L	.050	1.27	.075	1.91	—	—
M°	68°	68°	—	—	70°	70°
N	.309	7.85	.312	7.92	.315	8.00
P	.015	0.38	—	—	—	—
∅R	—	—	—	—	.015	.0

LTR	Inches/Millimeters <sup>3</sup>					
	Minimum		Nominal		Maximum	
	in.	mm	in.	mm	in.	mm
∅A	.208	5.28	.210	5.33	.216	5.49
∅B	.1810	4.60	.1820	4.62	—	—
C	.074	1.88	.076	1.93	.078	1.98
D <sup>4</sup>	.000	0.00	-.005	-0.13	-.010	-0.25
E	.015	0.38	.030	0.76	.045	1.14
F	.105	2.67	—	—	—	—
G <sup>5</sup>	.000	0.00	-.005	-0.13	-.010	-0.25
H	.170	4.32	—	—	—	—
∅J	.049	1.24	.050	1.27	.051	1.30
K	.218	5.54	—	—	—	—

### Notes:

1. I.D. to meet VSWR and contact resistance when mated with .0360 +.0008/-.0005 inches (.9144 +.0203/-.0127 millimeters) diameter pin.
2. When fully engaged, the two reference planes must coincide with metal-to-metal contact.
3. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
4. Dielectric insulator gap is measured from connector body reference plane .000 in. max. above (flush) to .010 in. max. below.
5. Center conductor gap is measured from connector body reference plane .000 in. max. above (flush) to .010 in. max. below.
6. This dimension may extend to the full length of coupling nut.



The specifications below are general specifications for all SMA connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

In the event of any conflict between these specifications and General Specification MIL-PRF-39012 and MIL-PRF-83517, these specifications shall govern. These specifications are subject to change according to the latest revision of MIL-PRF-39012 and MIL-PRF-83517.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per ZZ-R-765, CLASS IIB. 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 10,000 megaohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 2 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	60 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	15 in-lbs. minimum. Applicable to male connectors only.
Cable Retention Force	Refer to applicable military slash sheet or consult factory.
Mating Characteristics	See interface dimensions shown. Applicable to females only: oversize pin .0375 +.0001/-.0000 diameter, .030/.045 deep; Insertion force 2 lbs. maximum with .0370 +.0001/-.0000 diameter pin; withdrawal force 1oz. minimum with .0355 =.0001/-.0000 diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Recommended Mating Torque	7-10 inch-pounds.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

Complete specifications on every connector in this catalog are available from the factory.

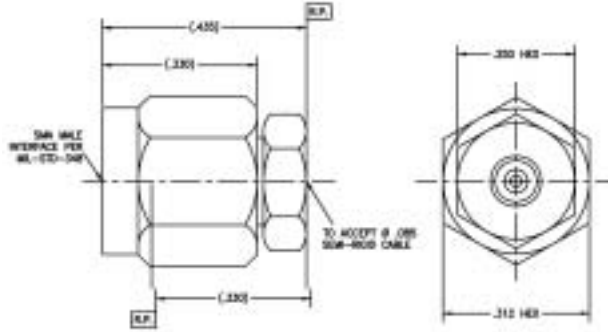




# SMA Semi-Rigid Cable Connectors

## 5285-0-4

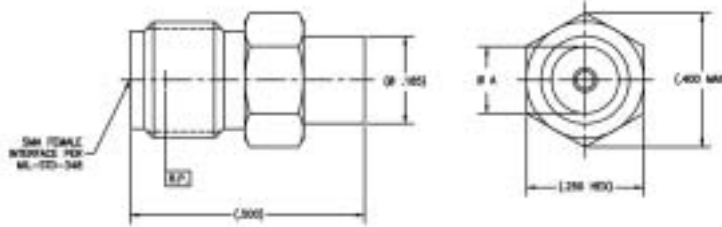
SMA male anti-torque straight to Ø .085 Semi-Rigid cable



Consult factory for Assembly Instructions

## 5286-1 thru -3

Straight cable female



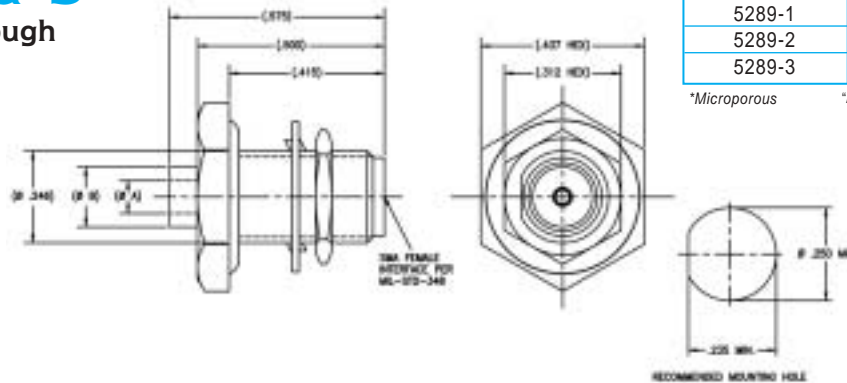
Tensolite Part No.	"A"	Cable type
5286-1	.143 min.	.141
5286-2	.088 min.	.085
5286-3	.143 min.	.141*

\*Microporous .185 and "A" diameters will be gold plated on SF units for solderability.

Refer to Assembly Instruction 113 on page 188

## 5289-1 thru -3

Bulkhead feedthrough cable female



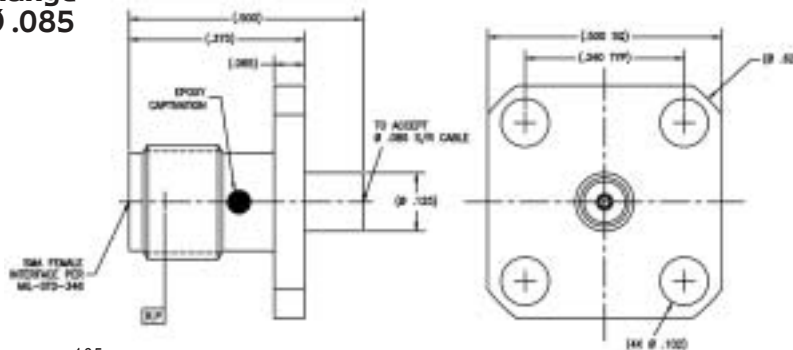
Tensolite Part No.	"A"	"B"	Cable type
5289-1	.143 min.	.250	.141
5289-2	.088 min.	.185	.085
5289-3	.143 min.	.250	.141*

\*Microporous "A" and "B" diameters will be gold plated on SF units for solderability.

Refer to Assembly Instruction 113 on page 188

## 5224-2CC

SMA female 4 hole flange (.500 sq) mount to Ø .085 Semi-Rigid cable



Tensolite Part No.	Cable type
5224-2CC	.085

Center conductor is captivated. .088 and .125 diameters will be gold plated on SF units for solderability.

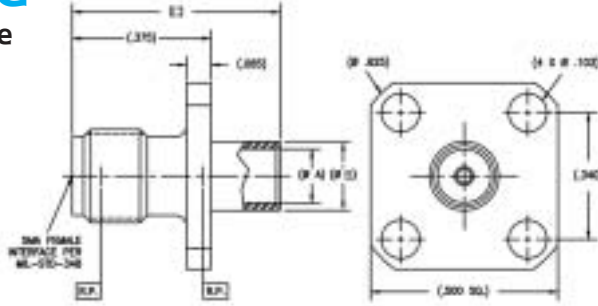
Refer to Assembly Instruction 120 on page 195

# SMA Semi-Rigid Cable Connectors

SMA Semi-Rigid Cable Connectors

## 5228-1 thru -3 & 5228-5CC

Flange mount cable female



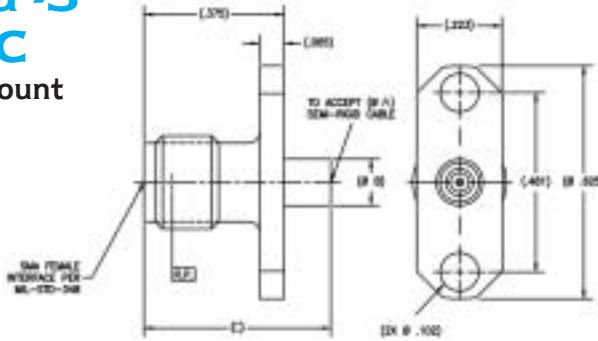
Tensolite Part No.	"A"	"B"	"C"	Cable type
5228-1	.143 min.	.185	.560	.141
5228-2	.088 min.	.125	.500	.085
5228-3	.143 min.	.185	.560	.141*
5228-5CC	.048 min.	.125	.440	.047

\*Microporous "A" and "B" diameters will be gold plated on SF units for solderability. Add suffix CC to Part No. for captivated contact.

Refer to Assembly Instruction 132 on page 201

## 5229-1 thru -3 & 5229-5CC

Two hole flange mount cable female



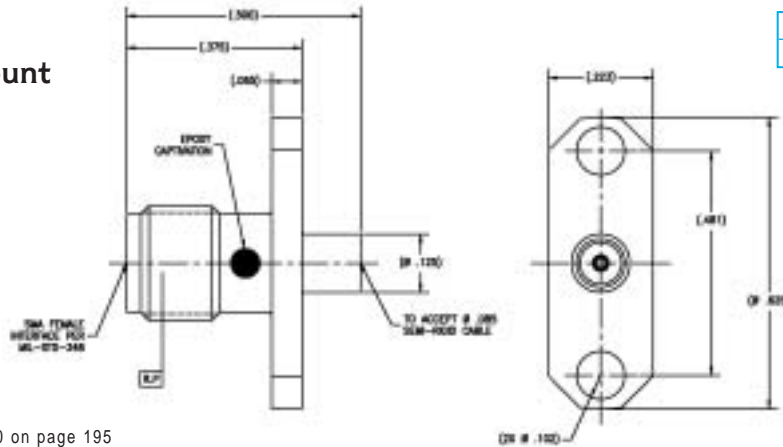
Tensolite Part No.	"A"	"B"	"C"	Cable type
5229-1	.143 min.	.185	.560	.141
5229-2	.088 min.	.125	.500	.085
5229-3	.143 min.	.185	.560	.141*
5229-5CC	.048 min.	.100	.440	.047

\*Microporous "A" and "B" diameters will be gold plated on SF units for solderability. Add suffix CC to Part No. for captivated contact.

5229-1,2,3, Refer to Assembly Instruction 113 on page 188

## 5225-2CC

Two hole flange mount cable female



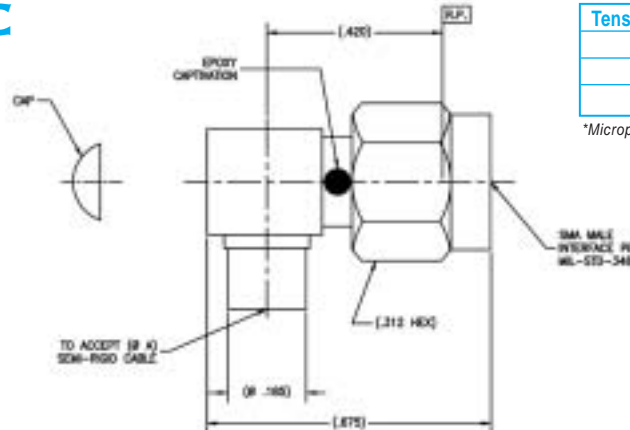
Tensolite Part No.	Cable type
5225-2CC	.085

Center conductor is captivated. .088 and .125 diameters will be gold plated on SF units for solderability.

Refer to Assembly Instruction 120 on page 195

## 5850-1 thru -3CC

Right Angle cable male



Tensolite Part No.	"A"	Cable type
5850-1CC	.143 min.	.141
5850-2CC	.088 min.	.085
5850-3CC	.143 min.	.141*

\*Microporous Center conductor is captivated. Coupling nut will be passivated stainless steel on SF units.

Refer to Assembly Instruction 124 on page 199

**Tensolite**

A CARLISLE Company

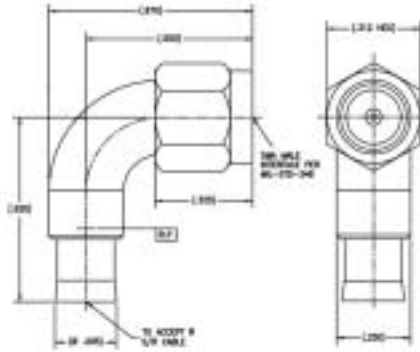
Call: 866-282-4708

Website: [www.tensolite.com](http://www.tensolite.com)

# SMA Semi-Rigid Cable Connectors

## 5236-1 & 5236-2

Radius right Angle cable male



5236-1, Refer to Assembly Instruction 105 on page 180  
5236-2, Refer to Assembly Instruction 106 on page 181

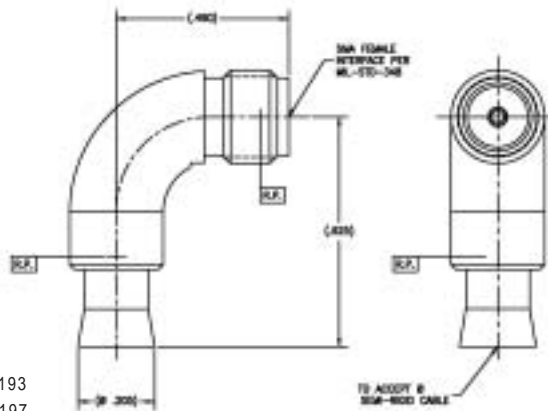
Tensolite Part No.	Cable type
5236-1	.141
5236-2	.085

Coupling nut will be passivated stainless steel on SF units.

Add suffix CC to Part No. for captivated contact.

## 5235-1 & 5235-2

Radius right Angle cable female



5235-1, Refer to Assembly Instruction 118 on page 193  
5235-2, Refer to Assembly Instruction 122 on page 197

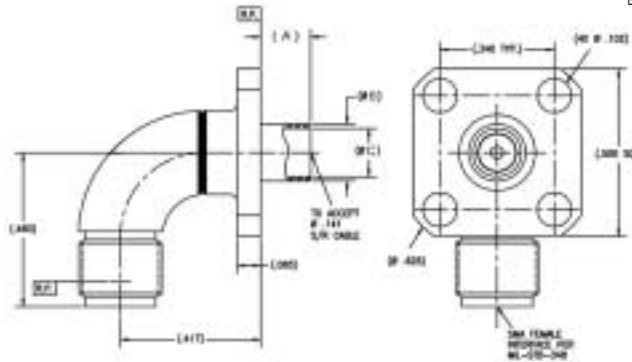
Tensolite Part No.	Cable type
5235-1	.141
5235-2	.085

5235-1: .143 and .205 diameters will be gold plated on SF units for solderability.  
5235-2: .088 and .185 diameters will be gold plated on SF units for solderability.

Add suffix CC to Part No. for captivated contact.

## 5161-1 & 5161-2

Radius right angle flange mount cable female



Tensolite Part No.	"A"	"B"	"C"	Cable type
5161-1	.150 min.	.170	.143	.141
5161-2	.100 min.	.125	.088	.085

"B" and "C" diameters will be gold plated on SF units for solderability.  
Add suffix CC to Part No. for captivated contact.

5161-1, Refer to Assembly Instruction 103 on page 178  
5161-2, Refer to Assembly Instruction 104 on page 179



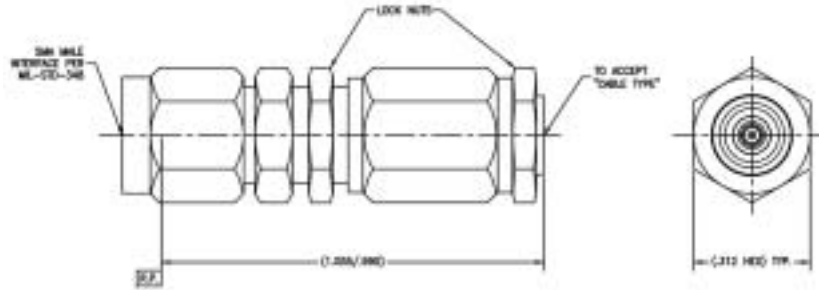
# SMA Phase Adjustable SMA Connector

## 5999-1CCSF & 5999-2CCSF

SMA male straight phase adjustable to Semi-Rigid cable

Tensolite Part No.	"A"	Cable type
5999-1CCSF	.143 min.	.141
5999-2CCSF	.088 min.	.085

Physical length change per revolution of adjustment nut: .018 inch  
 Electrical length change per revolution of adjustment nut: .0127  
 Max. change in physical length: .160 ± .010 inch of air  
 Max. change in electrical length: .103 ± .007 inch of air  
 Standard units are passivated; "A" & "B" diameters will be gold plated for solderability.  
 Center contact is captivated



Refer to Assembly Instruction 178, 179 on pages 204, 205

FREQUENCY (GHZ)	ELECTRICAL LENGTH FULLY CLOSED	ELECTRICAL LENGTH FULLY OPEN	MAX. DEGREE CHANGE (PHASE SHIFT)	DEGREES PHASE CHANGE PER REVOLUTION OF ADJUSTMENT NUT
2	53°	63°	10°	10.9°
4	106°	126°	20°	2.19°
6	159°	189°	29°	3.29°
8	212°	252°	39°	4.39°
10	265°	315°	49°	5.49°
12	318°	378°	59°	6.58°
14	371°	442°	68°	7.68°
16	424°	505°	78°	8.78°
18	477°	568°	88°	9.87°
20	530°	630°	97°	10.95°
22	583°	694°	107°	11.38°
24	636°	757°	117°	13.14°
26	689°	820°	127°	14.23°

### DESCRIPTION

The Tensolite 5999 is an adjustable coaxial phase shifter, covering DC through 26 GHz. Inserting this device into a cable/connector line provides continuously variable phase shift (up to 126 deg. at 26 GHz) allowing adjustment of the the electrical separation between the other components in a system.

Made of passivated stainless steel, the 5999 incorporates an SMA Male connector, spacing assembly, and a positive resettable locking mechanism.

### ELECTRICAL PERFORMANCE

Impedance: 50 OHMS over full adj. range  
 Frequency Range: DC-26 GHz

#### Working Voltage:

At Sea Level: 500 VRMS

At 70,000 Ft: 125 VRMS

VSWR: 1.05 + .008f (GHz) Max.

R.F. Insertion Loss: .05 x √F (GHz)

Insulation Resistance: 5000 Megohms Min.

Dielectric Withstanding Voltage: 1500 VRMS

R.F. High Potential Withstanding Voltage:

670 RMS @ 5 MHz to 7.5 MHz

R.F. Leakage: -90 db

#### Corona Level:

Voltage: 375

Altitude: 70,000 Ft.

#### Contact Resistance:

CENTER CONDUCTOR:

Before Environmental: 3.0 Milliohms Max.

After Environmental: 4.0 Milliohms Max.

OUTER CONDUCTOR:

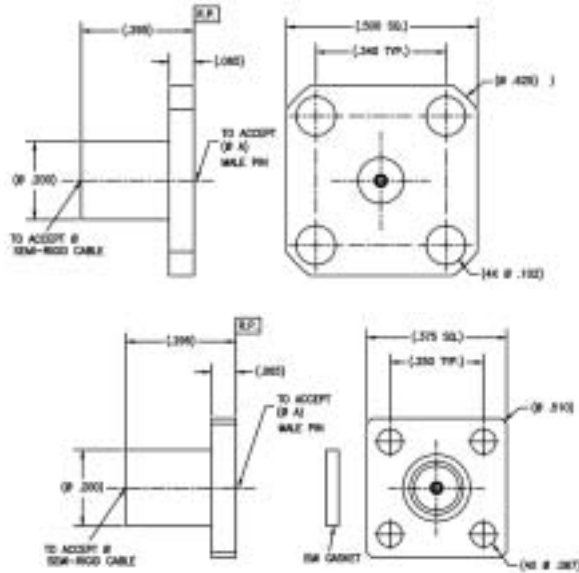
Before Environmental: 2.0 Milliohms Max.

After Environmental: Not Applicable

Permeability: Less Than 2.0 Mu

# SMA Semi-Rigid Cable Receptacles

## Connector receptacle 4 hole flange



Refer to Assembly Instruction 224 on page 208

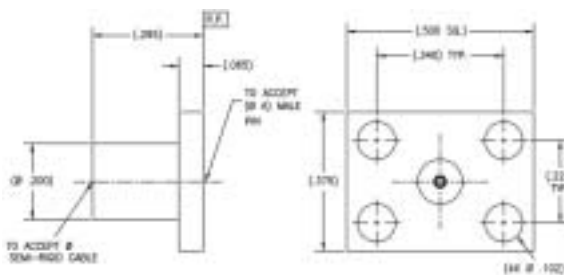
Tensolite Part No.	EMI gasket	Flange size	Cable type
5810-1CC thru 5810-6CC	none	.500 4 hole	.141
5811-2CC thru 5811-6CC	none	.500 4 hole	.085
5812-2CC thru 5812-6CC	none	.500 4 hole	.047
5813-2CC thru 5813-6CC	with	.500 4 hole	.085
5814-2CC thru 5814-6CC	with	.500 4 hole	.047
5815-1CC thru 5815-6CC	none	.375 4 hole	.141
5816-2CC thru 5816-6CC	none	.375 4 hole	.085
5817-2CC thru 5817-6CC	none	.375 4 hole	.047
5818-2CC thru 5818-6CC	with	.375 4 hole	.085
5819-2CC thru 5819-6CC	with	.375 4 hole	.047

### Pin Size Selection Chart

Dash number	-1cc	-2cc	-3cc	-4cc	-5cc	-6cc
Dim. "A" = ± .0005	.036	.020	.01	.012	.015	.018

Center connector is captivated

## Connector receptacle 4 hole flange



Refer to Assembly Instruction 224 on page 208

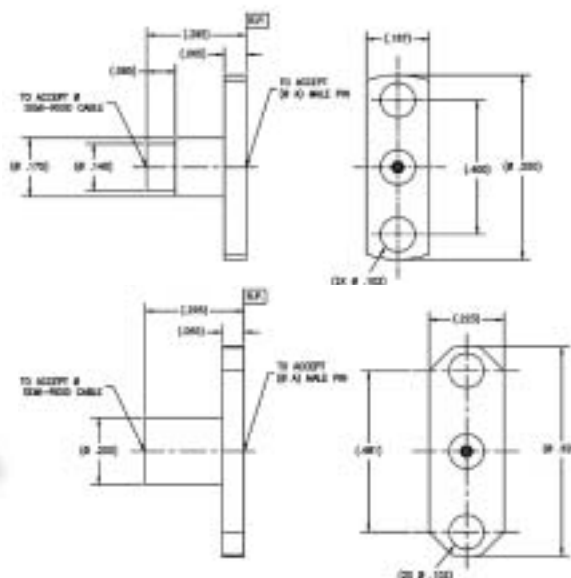
Tensolite Part No.	EMI gasket	Flange size	Cable type
5820-1CC thru 5820-6CC	none	.500 X .375 4 hole	.141
5821-2CC thru 5821-6CC	none	.500 X .375 4 hole	.085
5822-2CC thru 5822-6CC	none	.500 X .375 4 hole	.047
5823-2CC thru 5823-6CC	with	.500 X .375 4 hole	.085
5824-2CC thru 5824-6CC	with	.500 X .375 4 hole	.047

### Pin Size Selection Chart

Dash number	-1cc	-2cc	-3cc	-4cc	-5cc	-6cc
Dim. "A" = ± .0005	.036	.020	.01	.012	.015	.018

Center connector is captivated

## Connector receptacle 2 hole flange



Refer to Assembly Instruction 224 on page 208

Tensolite Part No.	EMI gasket	Flange size	Cable type
5785-1CC thru 5785-6CC	none	.550 X .187 2 hole	.141
5786-2CC thru 5786-6CC	none	.550 X .187 2 hole	.085
5787-2CC thru 5787-6CC	none	.550 X .187 2 hole	.047
5790-2CC thru 5790-6CC	none	.625 X .223 2 hole	.141
5791-1CC thru 5791-6CC	none	.625 X .223 2 hole	.085
5792-2CC thru 5792-6CC	none	.625 X .223 2 hole	.047
5793-2CC thru 5793-6CC	with	.625 X .223 2 hole	.085
5794-2CC thru 5794-6CC	with	.625 X .223 2 hole	.047

### Pin Size Selection Chart

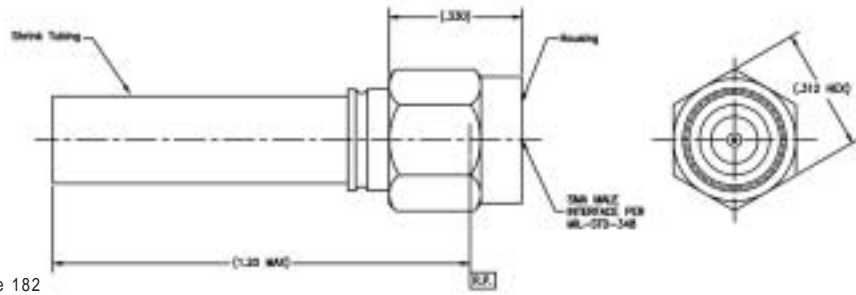
Dash number	-1cc	-2cc	-3cc	-4cc	-5cc	-6cc
Dim. "A" = ± .0005	.036	.020	.01	.012	.015	.018

Center connector is captivated

# SMA Flexible Cable Connectors

## 5730

**Straight cable male  
(crimp or solder  
attachment)**

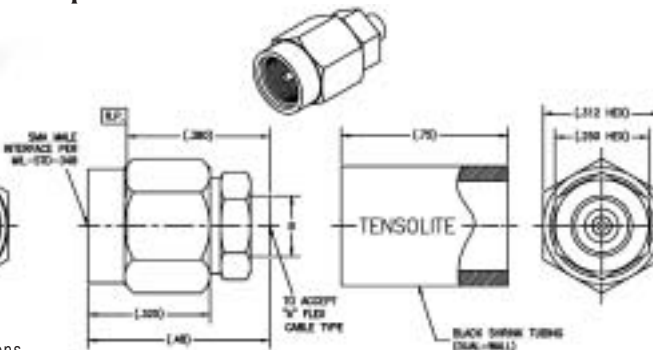


5730-1, Refer to Assembly Instruction 107 on page 182  
5730-2, Refer to Assembly Instruction 108 on page 183

Tensolite Part No.	Cable type
5730-1	RG 55, 58, 141, 142, 223, 303, 400
5730-2	RG 174, 188, 316, 179, 187

## 5733

**SMA male straight anti-torque  
to LLF1087 flex cable**

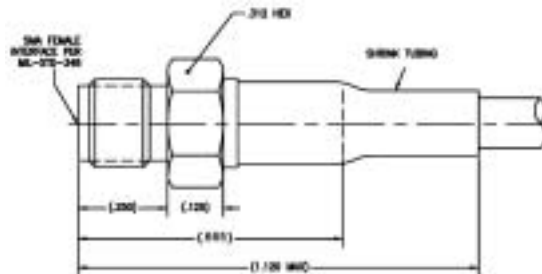


Consult factory for Assembly Instructions

Tensolite Part No.	"A" Cable Types	ØB
5733-1	LLF-1087	
5733-1SF	T-Flex 405HF and Microflex Ø .095	(.163)
5733-2	LLF-2105S	(.163)
5733-3	LLF-1141	(.185)
5733-3SF	T-Flex 402HF	
5733-4CCSF	LLF301	(.220)
5733-4CC		
5733-5	M17/152-00001	(.163)
5733-5SF		
5733-6	LLF-2078	(.163)
5733-6SF		

## 5720

**Straight cable female  
(crimp or solder  
attachment)**

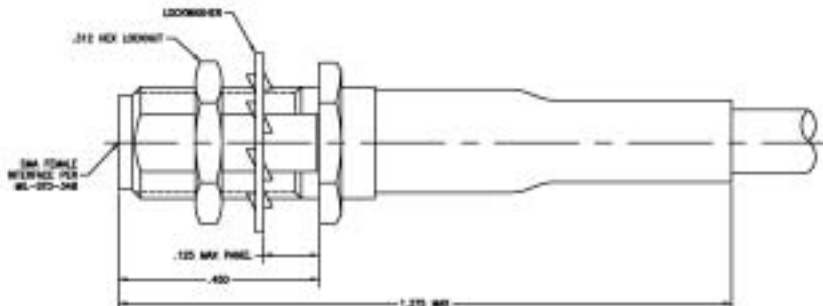


Refer to Assembly Instruction 109 on page 184

Tensolite Part No.	Cable type
5720-1	RG 55, 142, 223, 400, 58, 141, 303
5720-1SF	RG 55, 142, 223, 400, 58, 141, 303
5720-2	RG 174, 188, 316, 179, 187
5720-2SF	RG 174, 188, 316, 179, 187

## 5721

**Bulkhead feedthrough cable  
female (crimp or solder  
attachment)**



Refer to Assembly Instruction 110 on page 185

Tensolite Part No.	Cable type
5721-1	RG 55, 58, 141, 142, 223, 303, 400
5721-2	RG 174, 188, 316, 179, 187

**Tensolite**

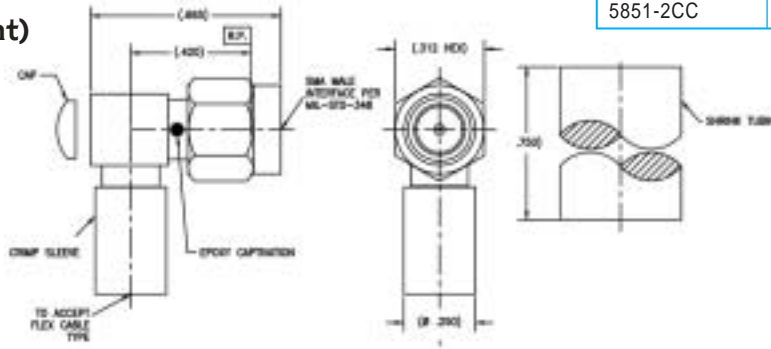
A CARLISLE Company

Call: 866-282-4708

Website: [www.tensolite.com](http://www.tensolite.com)

## 5851

Right angle cable male  
(crimp or solder attachment)



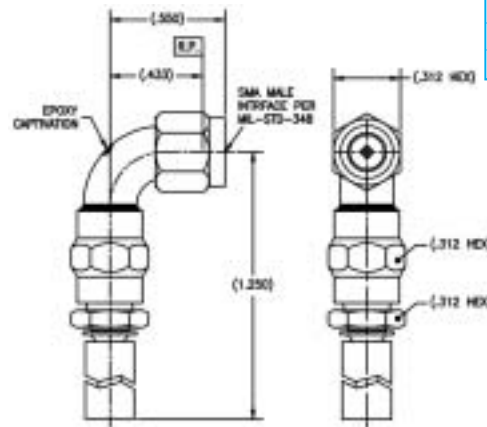
Tensolite Part No.	Cable type
5851-1CC	RG 55, 58, 141, 142, 223, 303, 400
5851-2CC	RG 174, 188, 316, 179, 187

Center conductor is captivated

Refer to Assembly Instruction 101 on page 176

## 5750

Radius right angle cable male



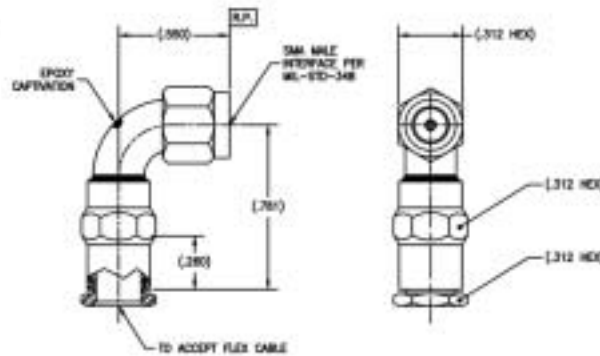
Tensolite Part No.	Cable type
5750-1CC	RG55, RG58, RG141, RG142, RG223, RG303, RG400
5750-2CC	RG174, RG179, RG187, RG188, RG316

Center conductor is captivated

Refer to Assembly Instruction 116 on page 191

## 5752

Radius right angle cable male



Tensolite Part No.	Cable type
5752-1CC	RG55, RG58, RG141, RG142, RG223, RG303, RG400
5752-2CC	RG174, RG179, RG187, RG188, RG316

Center conductor is captivated

Refer to Assembly Instruction 121 on page 196



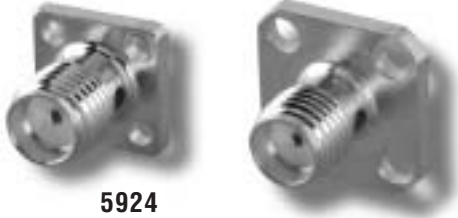
# SMA Bulkhead & Panel Mount Solder Pot Terminations

## 5924CC, 5260CC, 5270CC, 5277CC

Flange mount female

Tensolite Part No.	Flange Size
5924CC	.375
5260CC	.500
5270CC	.687
5277CC	1.000

Center conductor is captivated.

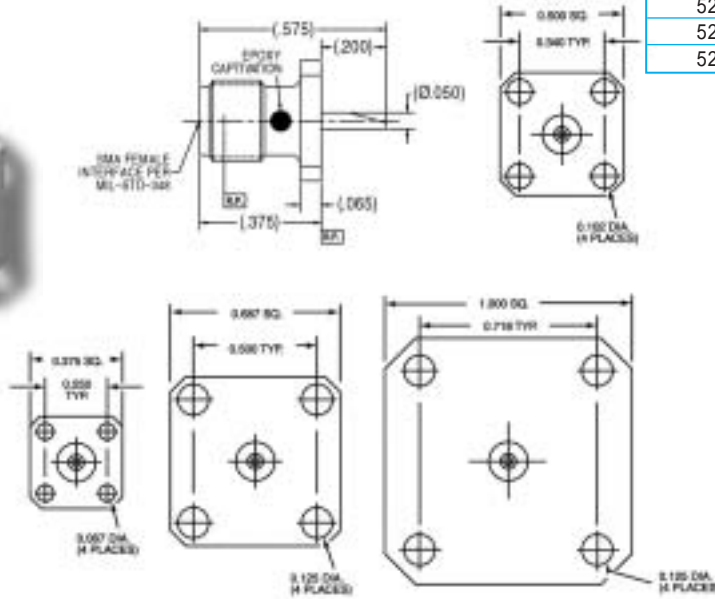


5924

5260



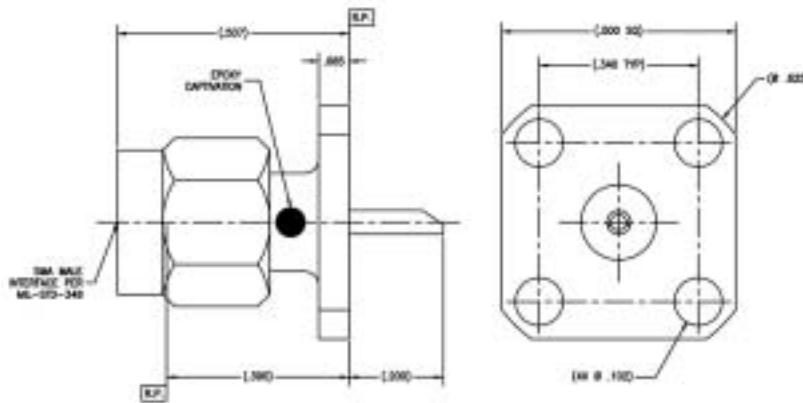
5270



## 5339CC

Flange mount male

Center conductor is captivated.

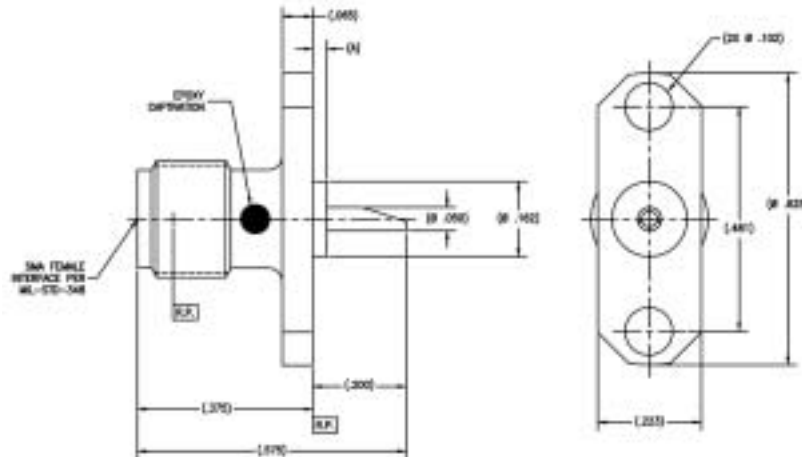


## 5210

Two hole flange mount female

Tensolite Part No.	"A"
5210-1CC	.000
5210-2CC	.020
5210-3CC	.030

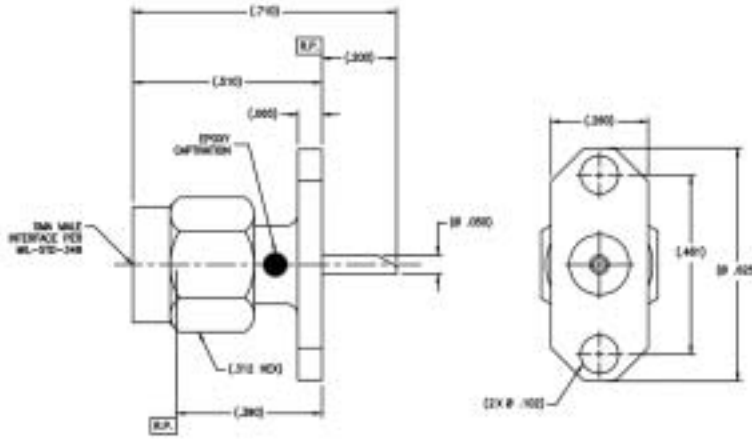
Center conductor is captivated.



# SMA Bulkhead & Panel Mount Solder Pot Terminations

## 5211CC

Two hole flange mount male

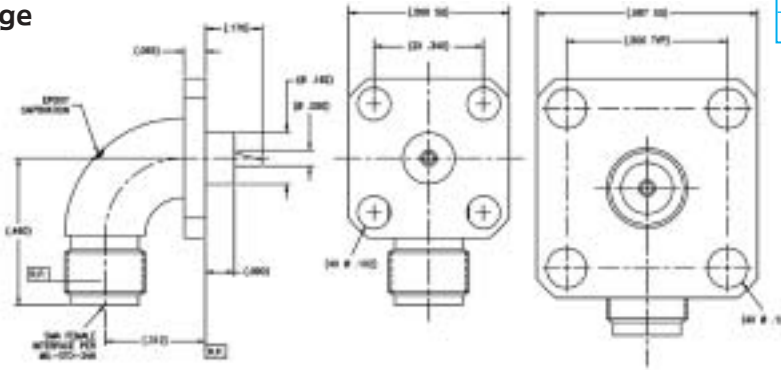


Center conductor is captivated.

SMA Bulkhead & Panel Mount Solder Pot Terminations

## 5430CC, 5424CC

Radius right angle flange mount female

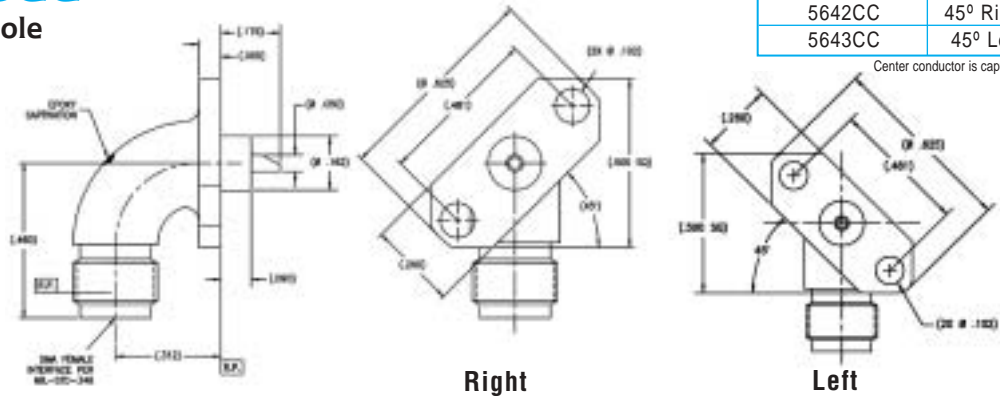


Tensolite Part No.	Flange Size
5430CC	.500
5424CC	.687

Center conductor is captivated.

## 5642CC, 5643CC

Radius right angle two hole flange mount female

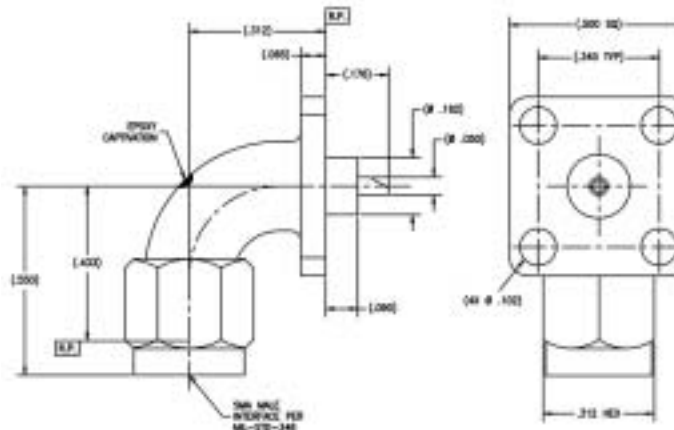


Tensolite Part No.	Flange Angle
5642CC	45° Right
5643CC	45° Left

Center conductor is captivated.

## 5432CC

Radius right angle flange mount male



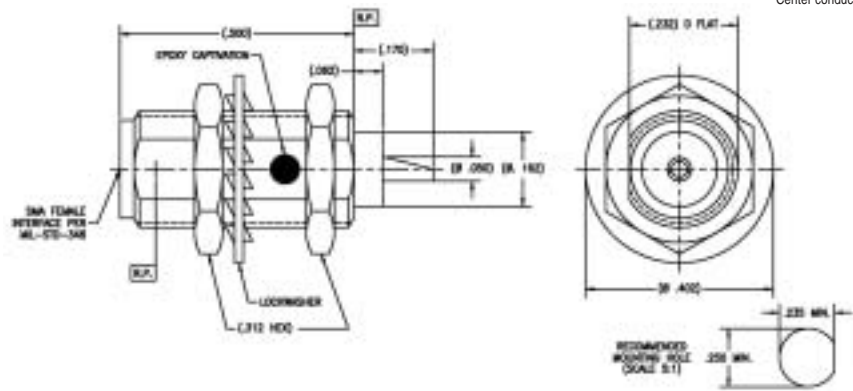
Center conductor is captivated.



# SMA Bulkhead & Panel Mount Solder Pot Terminations

## 5295CC

Bulkhead feedthrough female

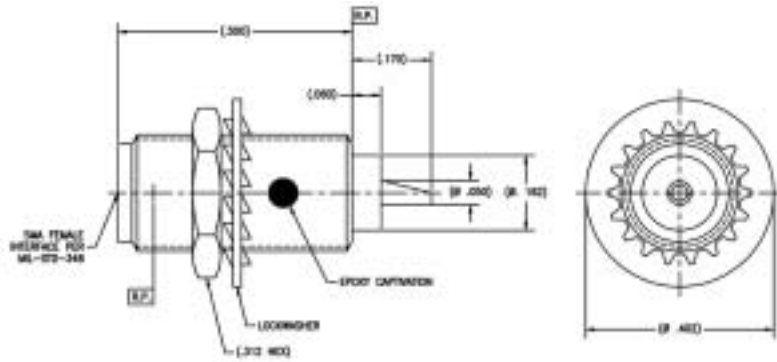


Center conductor is captivated

SMA Bulkhead & Panel Mount Solder Pot Terminations

## 5293CC

Bulkhead feedthrough female



Center conductor is captivated



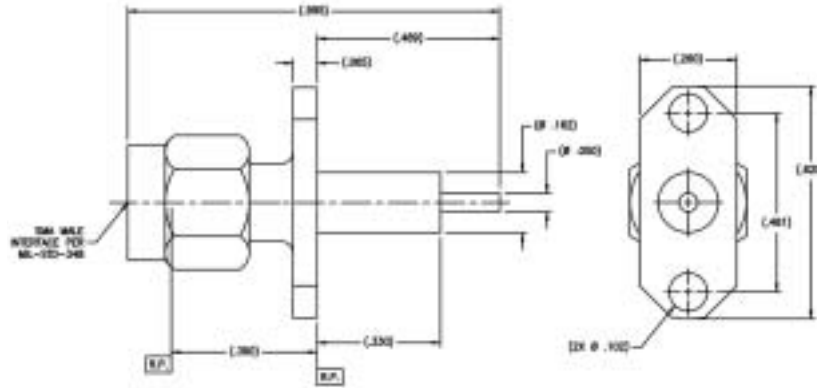


# SMA Bulkhead & Panel Mount Straight Terminations

## 5341

Two hole flange mount male

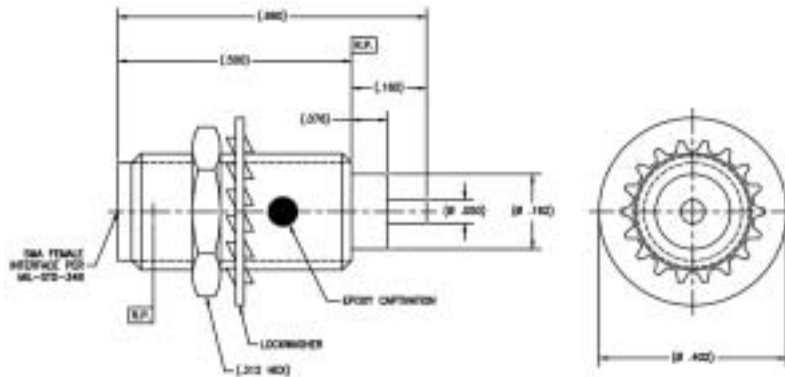
Add suffix CC to Part No. for captivated contact.



## 5294CC

Bulkhead feedthrough female

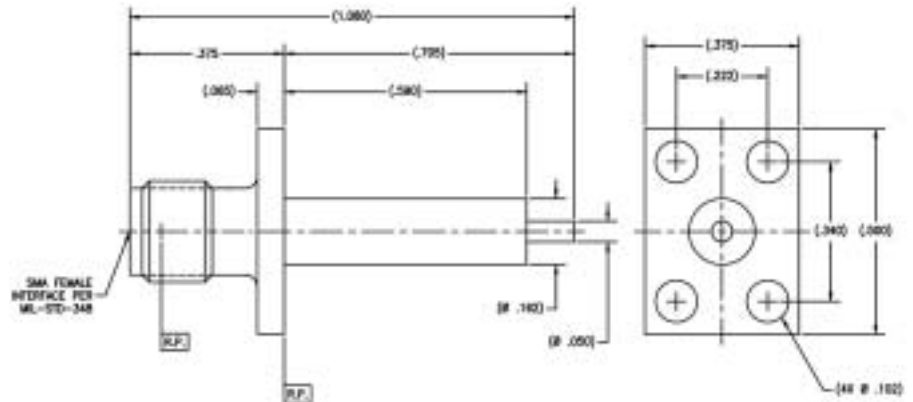
Center conductor is captivated.



## 5691

Flange mount female

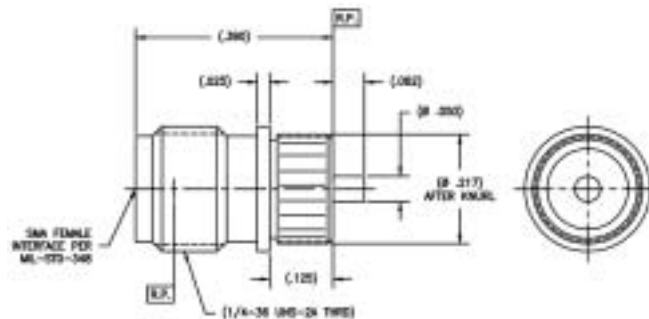
Add suffix CC to Part No. for captivated contact.



## 5890

Panel press mount female

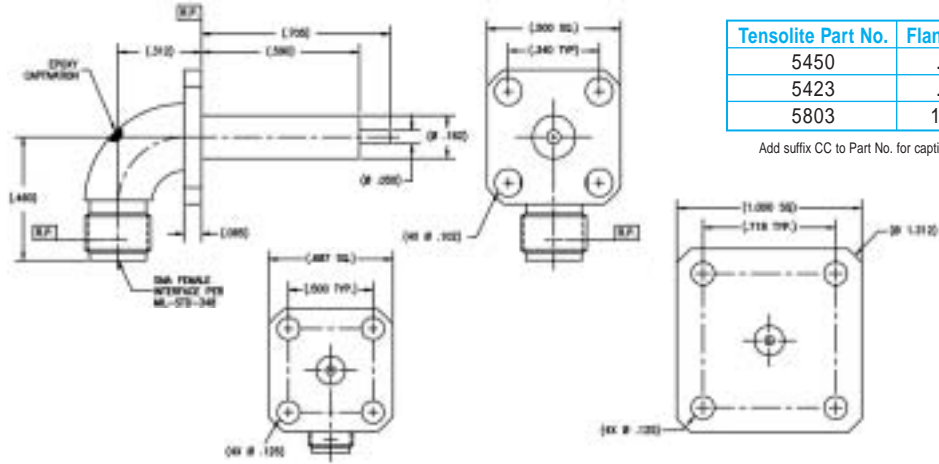
Add suffix CC to Part No. for captivated contact.



# SMA Bulkhead & Panel Mount Straight Terminations

## 5450, 5423, 5803

Radius right angle flange mount female

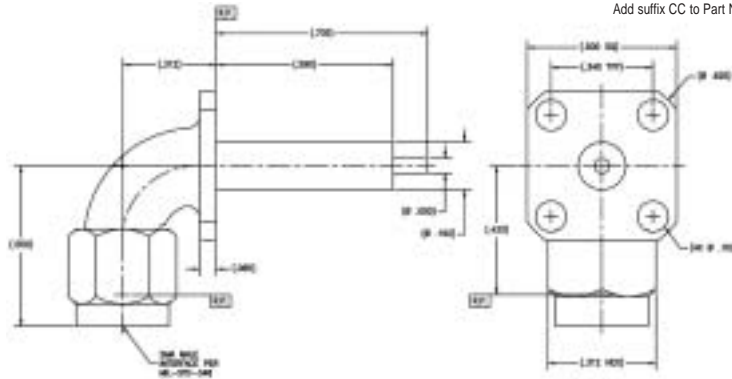


Tensolite Part No.	Flange Size
5450	.500
5423	.687
5803	1.000

Add suffix CC to Part No. for captivated contact.

## 5901

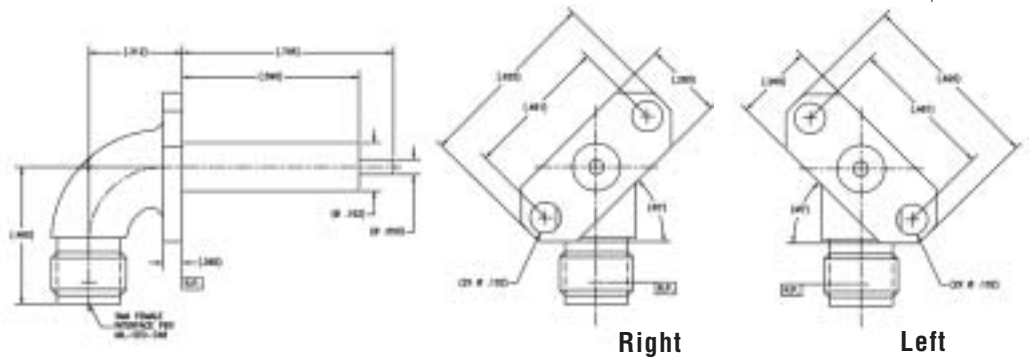
Radius right angle flange mount male



Add suffix CC to Part No. for captivated contact.

## 5648, 5649

Radius right angle two-hole flange mount female

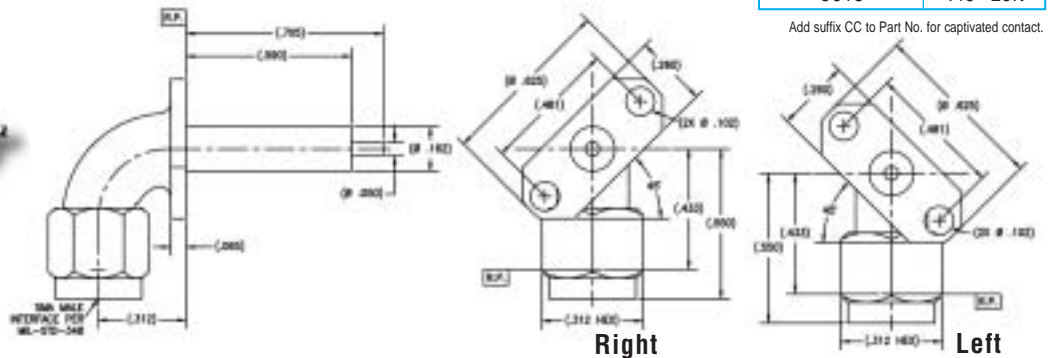


Tensolite Part No.	Flange Angle
5648	.45° Right
5649	.45° Left

Add suffix CC to Part No. for captivated contact.

## 5617, 5618

Radius right angle two-hole flange mount male



Tensolite Part No.	Flange Angle
5617	.45° Right
5618	.45° Left

Add suffix CC to Part No. for captivated contact.

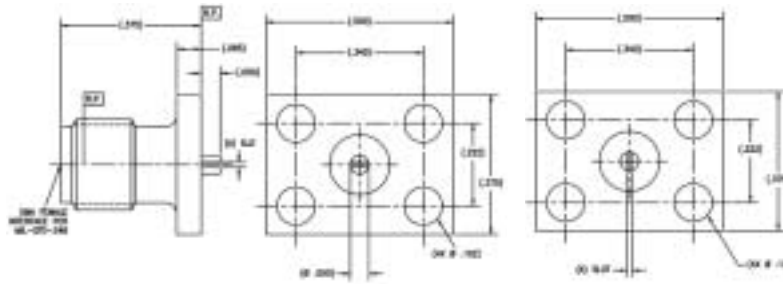




# SMA Bulkhead & Panel Mount Slotted Terminations

## 5698, 5700

Flange mount female



Horizontal

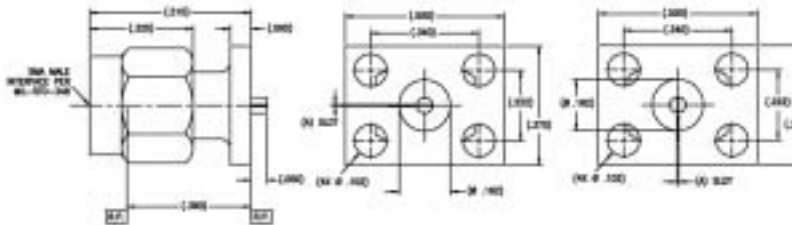
Vertical

Tensolite Part No.	"A" Slot +.003/- .001	Slot Position
5698-1	.012	horizontal
5698-2	.018	horizontal
5698-3	.028	horizontal
5698-4	.036	horizontal
5700-1	.012	vertical
5700-2	.018	vertical
5700-3	.028	vertical
5700-4	.036	vertical

Add suffix CC to Part No. for captivated contact.

## 5710, 5712

Flange mount male



Horizontal

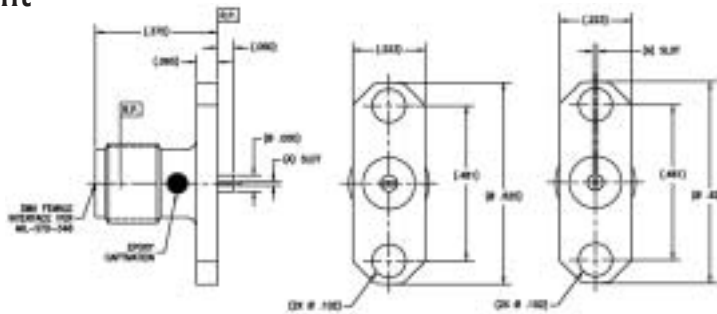
Vertical

Tensolite Part No.	"A" Slot +.003/- .001	Slot Position
5710-1	.012	horizontal
5710-2	.018	horizontal
5710-3	.028	horizontal
5710-4	.036	horizontal
5712-1	.012	vertical
5712-2	.018	vertical
5712-3	.028	vertical
5712-4	.036	vertical

Add suffix CC to Part No. for captivated contact.

## 5208, 5209

Two-hole flange mount female



Horizontal

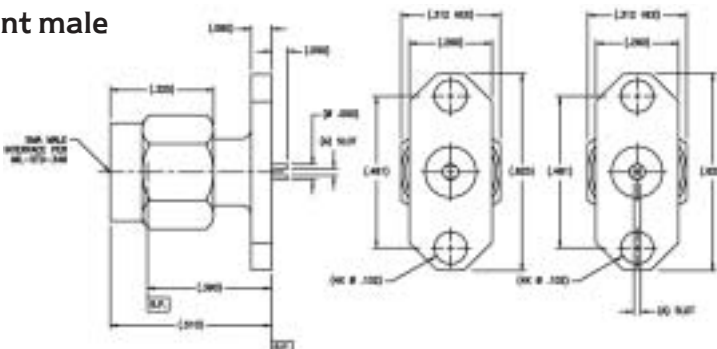
Vertical

Tensolite Part No.	"A" Slot +.003/- .001	Slot Position
5208-1	.012	horizontal
5208-2	.018	horizontal
5208-3	.028	horizontal
5208-4	.036	horizontal
5209-1	.012	vertical
5209-2	.018	vertical
5209-3	.028	vertical
5209-4	.036	vertical

Add suffix CC to Part No. for captivated contact.

## 5205, 5206

Two-hole flange mount male



Horizontal

Vertical

Tensolite Part No.	"A" Slot +.003/- .001	Slot Position
5205-1	.012	horizontal
5205-2	.018	horizontal
5205-3	.028	horizontal
5205-4	.036	horizontal
5206-1	.012	vertical
5206-2	.018	vertical
5206-3	.028	vertical
5206-4	.036	vertical

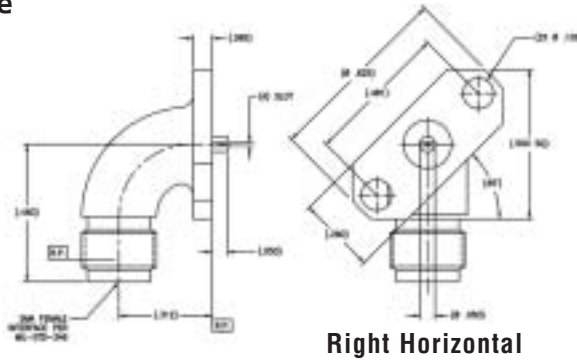
Add suffix CC to Part No. for captivated contact.



# SMA Bulkhead & Panel Mount Slotted Terminations

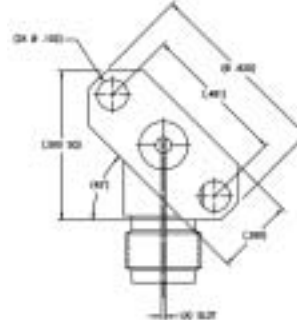
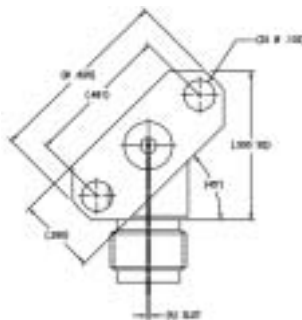
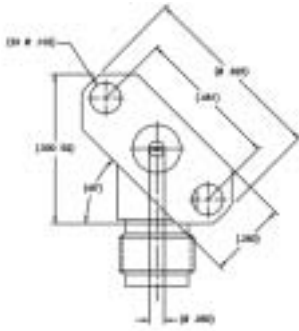
## 5654, 5655, 5657, 5658

Radius right angle two-hole flange mount female



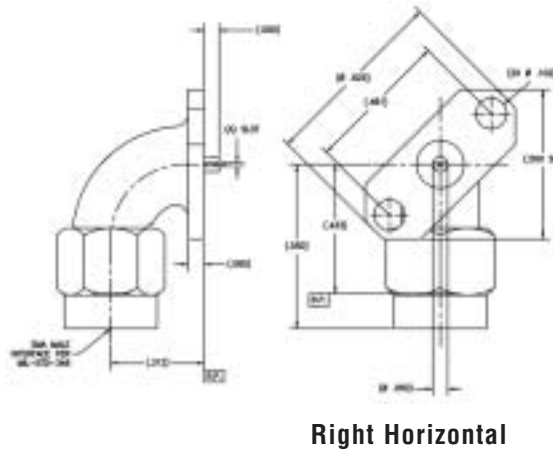
Tensolite Part No.	"A" Slot +.003/-0.001	Flange Angle	Slot Position
5654-1	.012	45° right	Horizontal
5654-2	.018	45° right	Horizontal
5654-3	.028	45° right	Horizontal
5654-4	.036	45° right	Horizontal
5655-1	.012	45° left	Horizontal
5655-2	.018	45° left	Horizontal
5655-3	.028	45° left	Horizontal
5655-4	.036	45° left	Horizontal
5657-1	.012	45° right	Vertical
5657-2	.018	45° right	Vertical
5657-3	.028	45° right	Vertical
5657-4	.036	45° right	Vertical
5658-1	.012	45° left	Vertical
5658-2	.018	45° left	Vertical
5658-3	.028	45° left	Vertical
5658-4	.036	45° left	Vertical

Add suffix CC to Part No. for captivated contact.



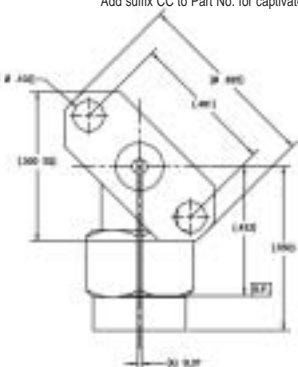
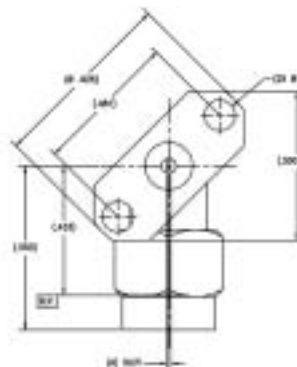
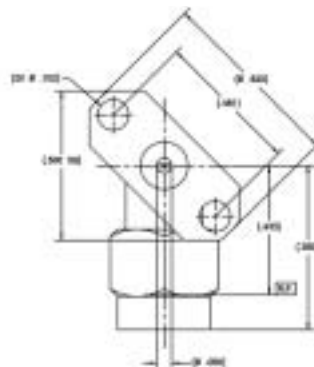
## 5626, 5627, 5629, 5630

Radius right angle two-hole flange mount male



Tensolite Part No.	"A" Slot +.003/-0.001	Flange Angle	Slot Position
5626-1	.012	45° right	Horizontal
5626-2	.018	45° right	Horizontal
5626-3	.028	45° right	Horizontal
5626-4	.036	45° right	Horizontal
5627-1	.012	45° left	Horizontal
5627-2	.018	45° left	Horizontal
5627-3	.028	45° left	Horizontal
5627-4	.036	45° left	Horizontal
5629-1	.012	45° right	Vertical
5629-2	.018	45° right	Vertical
5629-3	.028	45° right	Vertical
5629-4	.036	45° right	Vertical
5630-1	.012	45° left	Vertical
5630-2	.018	45° left	Vertical
5630-3	.028	45° left	Vertical
5630-4	.036	45° left	Vertical

Add suffix CC to Part No. for captivated contact.



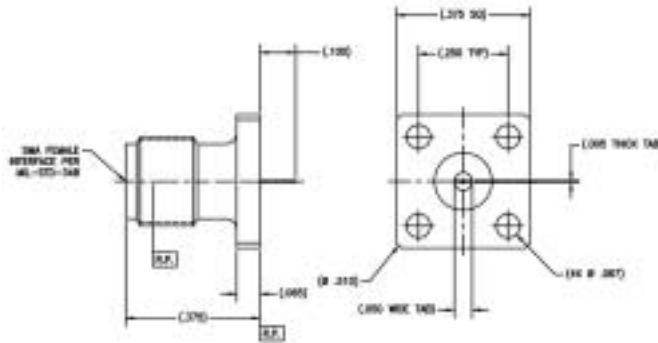




# SMA Bulkhead & Panel Mount Tab Terminations

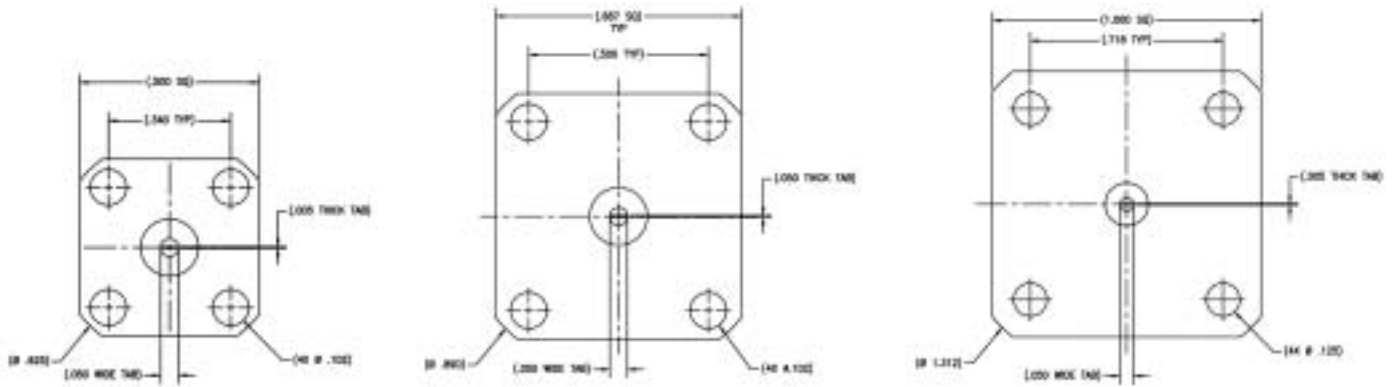
## 5922, 5762, 5271, 5276

Flange mount female



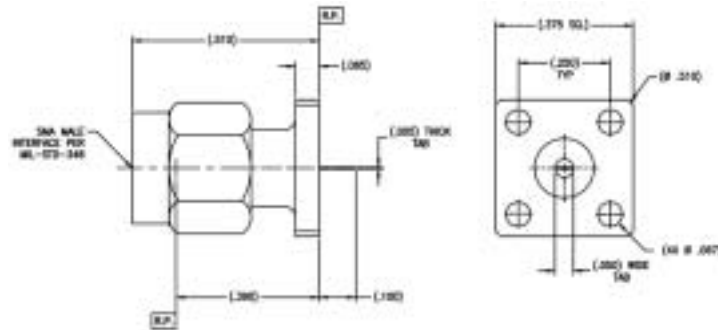
Tensolite Part No.	Flange Size
5922	.375
5762	.500
5271	.687
5276	1.000

Add suffix CC to Part No. for captivated contact.



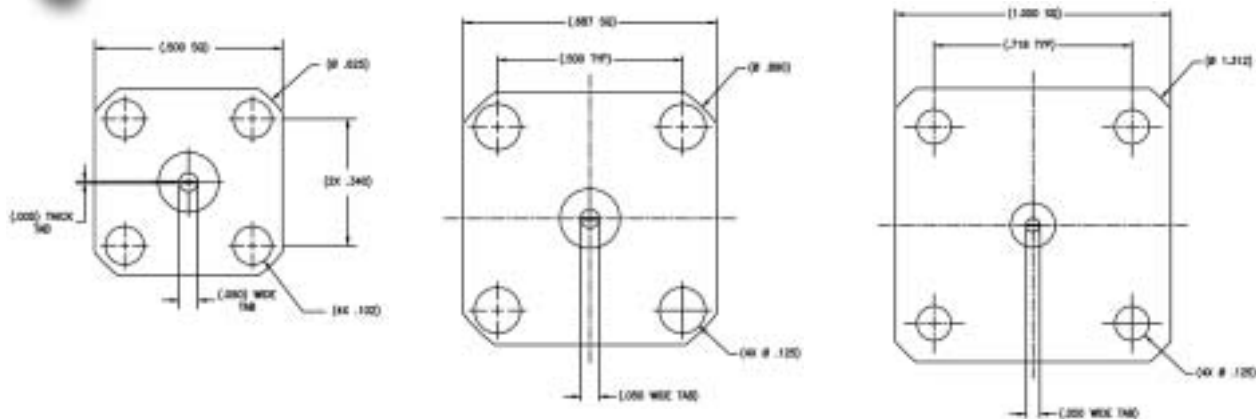
## 5930, 5348, 5357, 5352

Flange mount male



Tensolite Part No.	Flange Size
5930	.375
5348	.500
5357	.687
5352	1.000

Add suffix CC to Part No. for captivated contact.

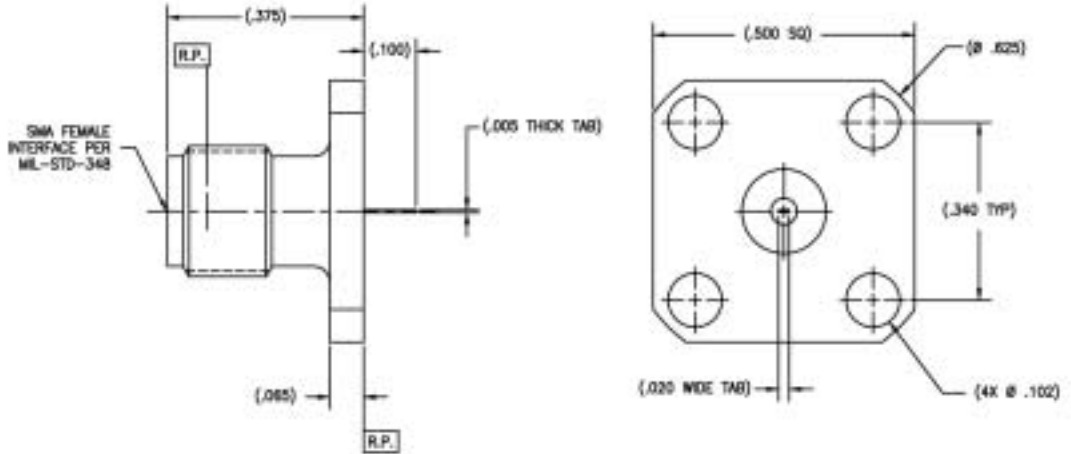


# SMA Bulkhead & Panel Mount Tab Terminations

Add suffix CC to Part No. for captivated contact.

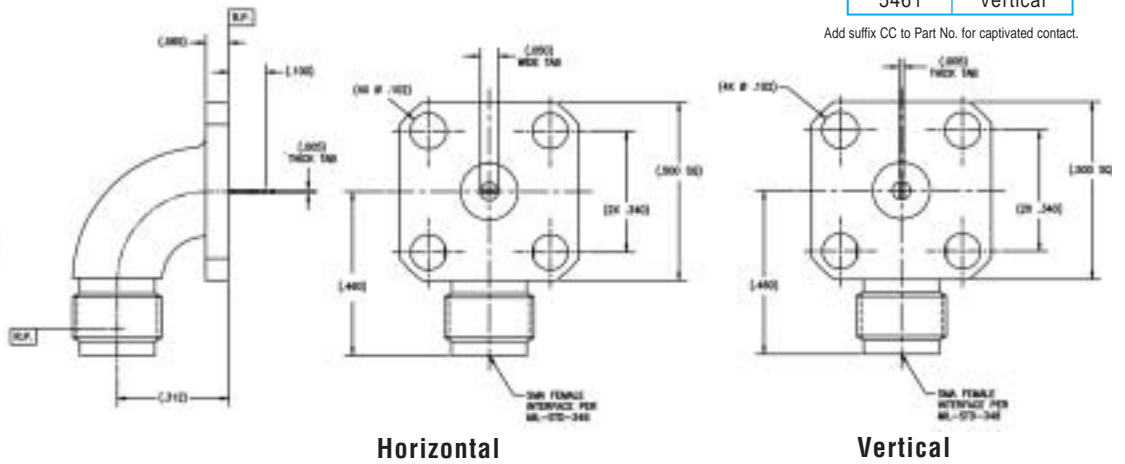
## 5763

Flange mount female  
.020 wide tab



## 5460, 5461

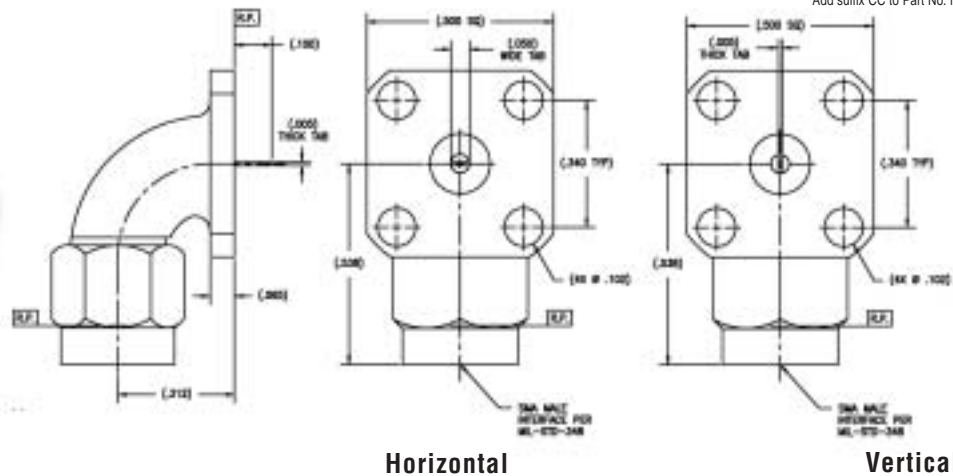
Radius right angle  
flange mount female



Add suffix CC to Part No. for captivated contact.

## 5880, 5881

Radius right angle  
flange mount male



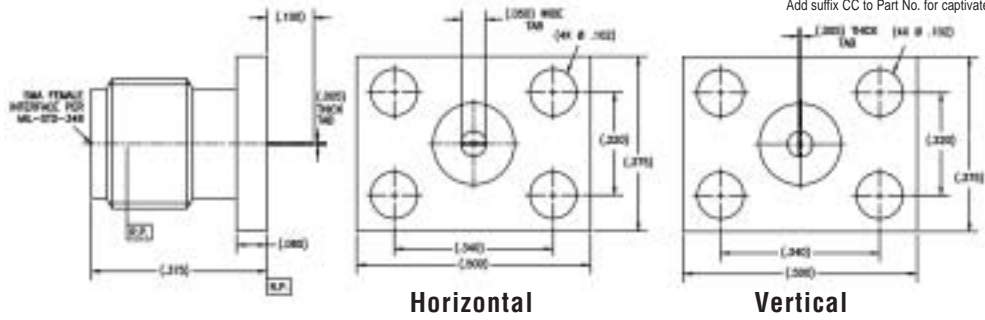
Add suffix CC to Part No. for captivated contact.



# SMA Bulkhead & Panel Mount Tab Terminations

## 5692, 5694

Rectangular flange mount female

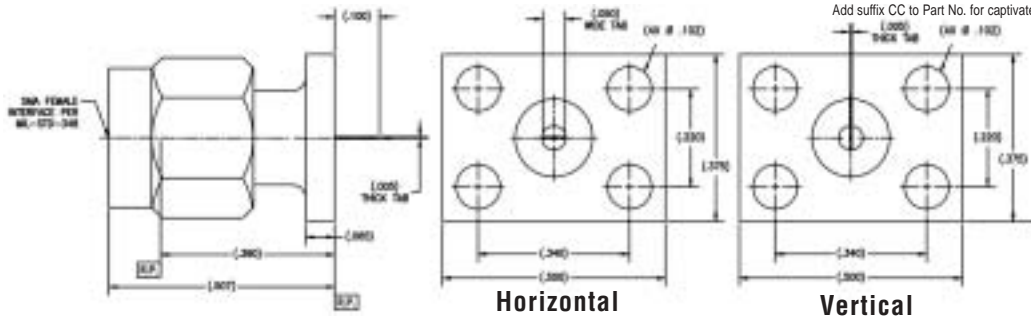


Tensolite Part No.	Tab Position
5692	Horizontal
5694	Vertical

Add suffix CC to Part No. for captivated contact.

## 5704, 5706

Rectangular flange mount male

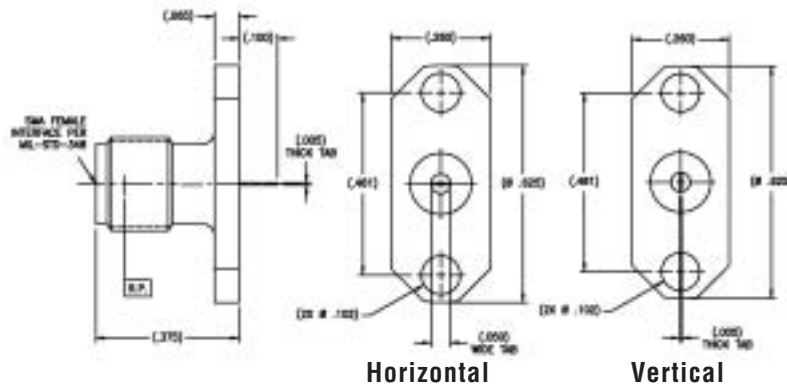


Tensolite Part No.	Tab Position
5704	Horizontal
5706	Vertical

Add suffix CC to Part No. for captivated contact.

## 5250, 5251

Two hole flange mount female

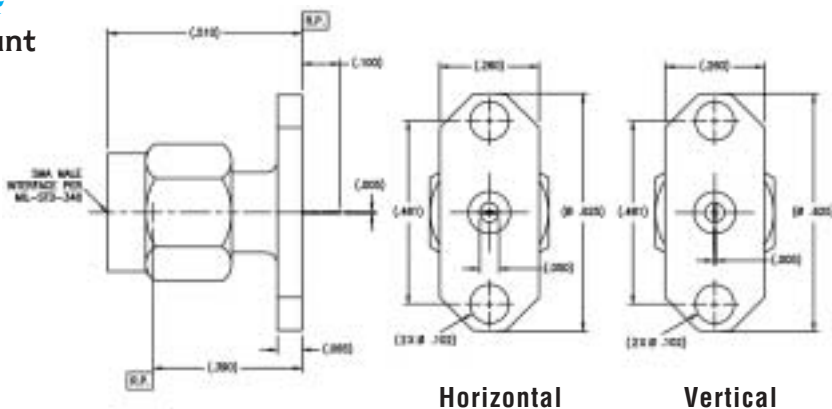


Tensolite Part No.	Tab Position
5250	Horizontal
5251	Vertical

Add suffix CC to Part No. for captivated contact.

## 5343, 5344

Two hole flange mount male



Tensolite Part No.	Tab Position
5343	Horizontal
5344	Vertical

Add suffix CC to Part No. for captivated contact.

SMA Bulkhead & Panel Mount Tab Terminations



# SMA Bulkhead & Panel Mount Female Contact Terminations (Field Replaceables)

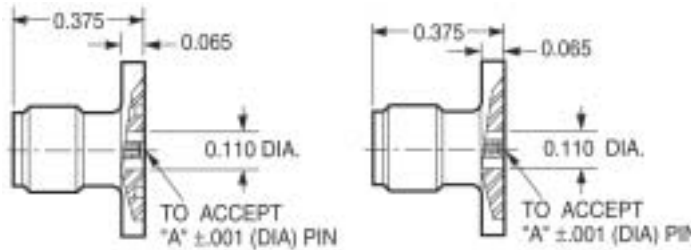
SMA Bulkhead & Panel Mount Female Contact Terminations (Field Replaceables)

## Flange mount female airsection design style



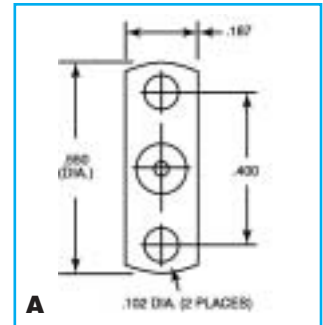
Tensolite Part No. with gasket	Tensolite Part No. w/o gasket	Flange Size	Fig.			
5601-	5674-	2 hole, .187 x .550	A			
5685-	5681-	2 hole, .223 x .625	B			
5935-	5923-	4 hole, .375 x .375	C			
5715-	5717-	4 hole, .375 x .500	D			
5684-	5680-	4 hole, .500 x .500	E			
Select -1CC thru -6CC size female contact to accept "A" diameter pin x 0.090 long						
Dash No.	-1CC	-2CC	-3CC	-4CC	-5CC	-6CC
"A" ± .001	.0360	.0200	.0100	.0120	.0150	.0180

Center conductor is mechanically captivated.

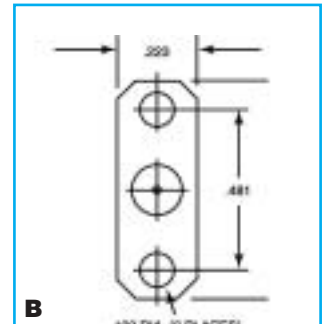


With Conductive Gasket

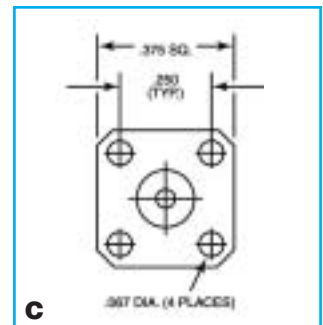
Without Conductive Gasket



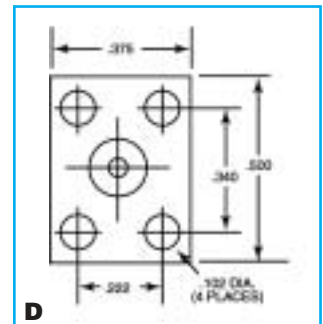
A



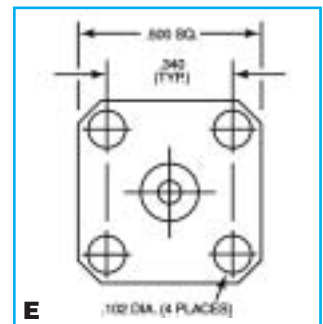
B



C



D



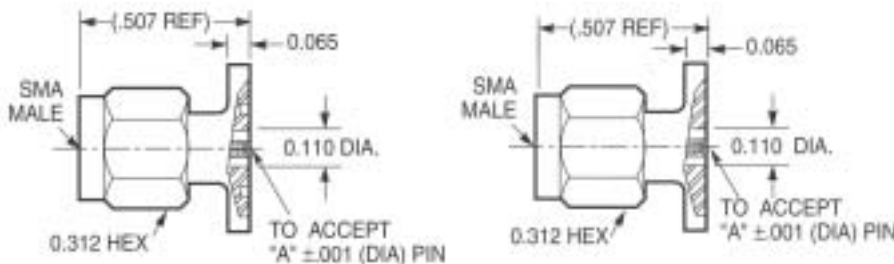
E

## Flange mount male airsection design style



Tensolite Part No. with gasket	Tensolite Part No. w/o gasket	Flange Size	Fig.			
5633-	5675-	2 hole, .187 x .550	A			
5687-	5683-	2 hole, .223 x .625	B			
5936-	5925-	4 hole, .375 x .375	C			
5716-	5718-	4 hole, .375 x .500	D			
5686-	5780-	4 hole, .500 x .500	E			
Select -1CC thru -6CC size female contact to accept "A" diameter pin x 0.090 long						
Dash No.	-1CC	-2CC	-3CC	-4CC	-5CC	-6CC
"A" ± .001	.0360	.0200	.0100	.0120	.0150	.0180

Center conductor is mechanically captivated.



With Conductive Gasket

Without Conductive Gasket

# SMA Bulkhead & Panel Mount Female Contact Terminations (Field Replaceables)

Flange mount female flush PTFE design style (mechanical captivation)

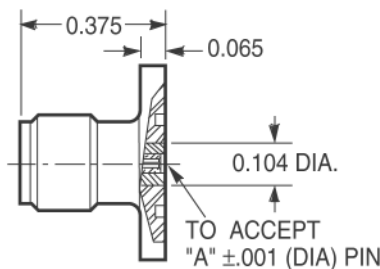


Tensolite Part No. with gasket	Tensolite Part No. w/o gasket	Flange Size	Fig.
5634-	5678-	2 hole, .187 x .550	A
5602-	5663-	2 hole, .223 x .625	B
5603-	5941-	4 hole, .375 x .375	C
5605-	5668-	4 hole, .375 x .500	D
5604-	5665-	4 hole, .500 x .500	E

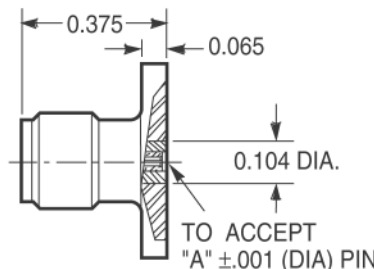
Select -2CC thru -6CC size female contact to accept "A" diameter pin x 0.090 long

Dash No.	-2CC	-3CC	-4CC	-5CC	-6CC
"A" ±.001	.0200	.0100	.0120	.0150	.0180

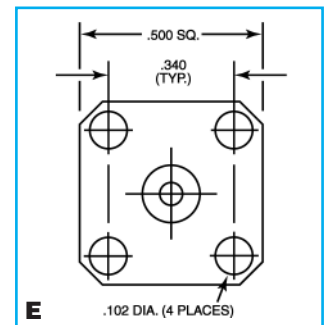
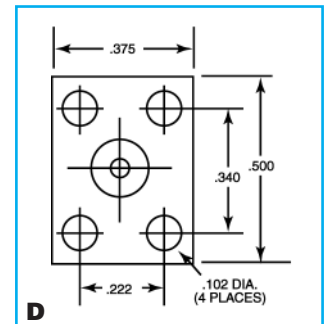
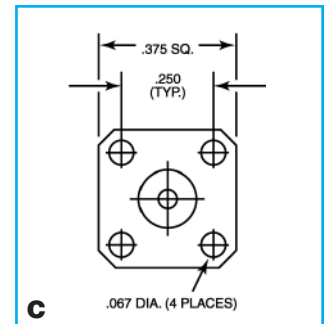
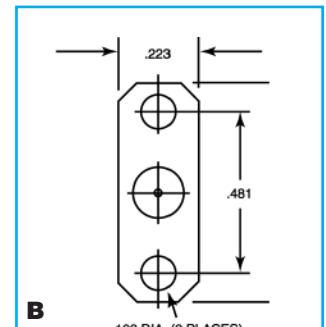
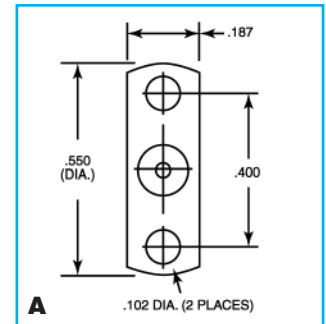
Center conductor is mechanically captivated.



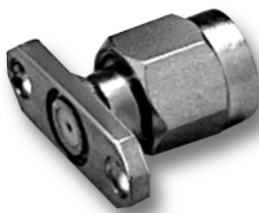
With Conductive Gasket



Without Conductive Gasket



Flange mount male flush PTFE design style (mechanical captivation)

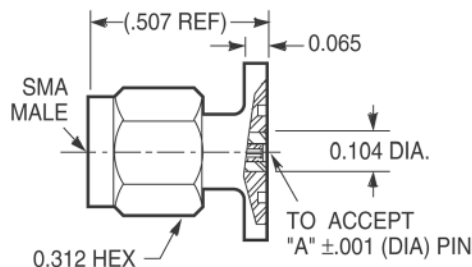


Tensolite Part No. with gasket	Tensolite Part No. w/o gasket	Flange Size	Fig.
5635-	5679-	2 hole, .187 x .550	A
5606-	5664-	2 hole, .223 x .625	B
5607-	5942-	4 hole, .375 x .375	C
5609-	5669-	4 hole, .375 x .500	D
5608-	5666-	4 hole, .500 x .500	E

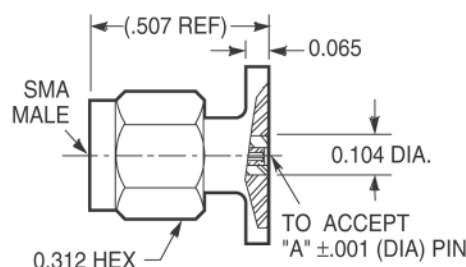
Select -2CC thru -6CC size female contact to accept "A" diameter pin x 0.090 long

Dash No.	-2CC	-3CC	-4CC	-5CC	-6CC
"A" ±.001	.0200	.0100	.0120	.0150	.0180

Center conductor is mechanically captivated.



With Conductive Gasket

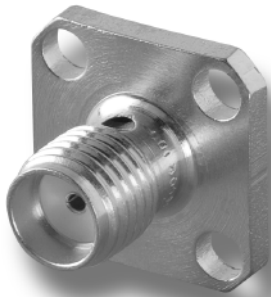


Without Conductive Gasket

# SMA Bulkhead & Panel Mount Female Contact Terminations (Field Replaceables)

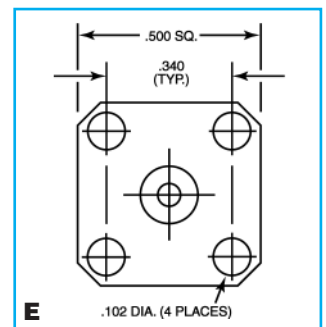
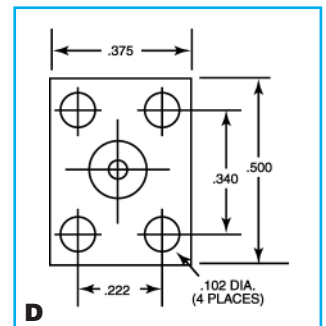
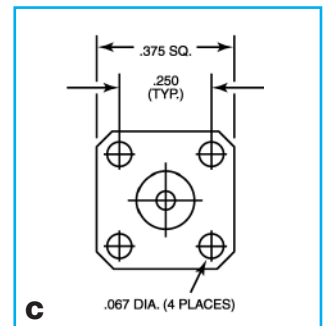
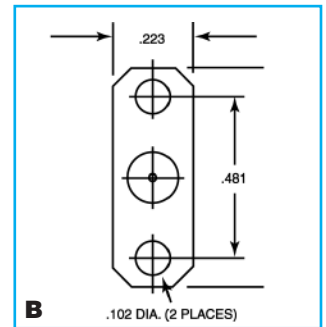
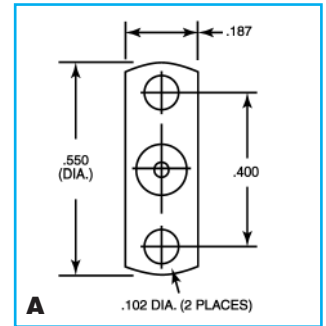
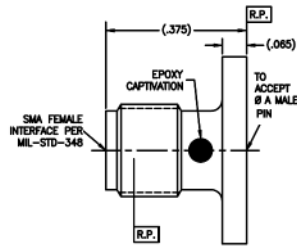
SMA Bulkhead & Panel Mount Female Contact Terminations (Field Replaceables)

## Flange mount female flush PTFE design style



Tensolite Part No. with gasket	Tensolite Part No. w/o gasket	Flange Size	Fig.			
N/A	N/A	2 hole, .187 x .550	A			
N/A	5981-	2 hole, .223 x .625	B			
N/A	5937-	4 hole, .375 x .375	C			
N/A	5734-	4 hole, .375 x .500	D			
N/A	5980-	4 hole, .500 x .500	E			
Select -1CC thru -6CC size female contact to accept "A" diameter pin x 0.090 long						
Dash No.	-1CC	-2CC	-3CC	-4CC	-5CC	-6CC
"A" ± .001	.0360	.0200	.0100	.0120	.0150	.0180

Center conductor is epoxy captivated.

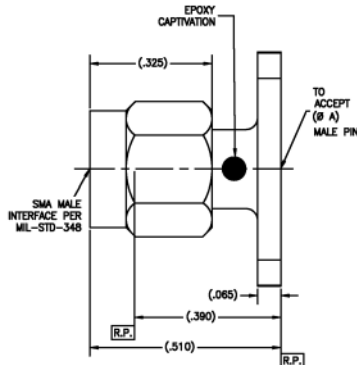


## Flange mount male flush PTFE design style



Tensolite Part No. with gasket	Tensolite Part No. w/o gasket	Flange Size	Fig.			
N/A	N/A	2 hole, .187 x .550	A			
N/A	5983-	2 hole, .223 x .625	B			
N/A	5938-	4 hole, .375 x .375	C			
N/A	5714-	4 hole, .375 x .500	D			
N/A	5982-	4 hole, .500 x .500	E			
Select -1CC thru -6CC size female contact to accept "A" diameter pin x 0.090 long						
Dash No.	-1CC	-2CC	-3CC	-4CC	-5CC	-6CC
"A" ± .001	.0360	.0200	.0100	.0120	.0150	.0180

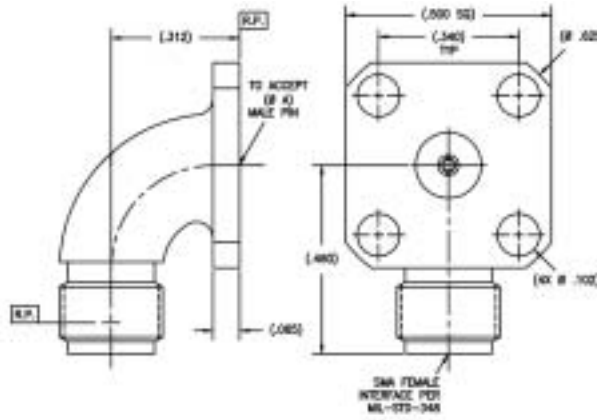
Center conductor is epoxy captivated.



# SMA Bulkhead & Panel Mount Female Contact Terminations

## 5530

Radius right angle  
flange mount female

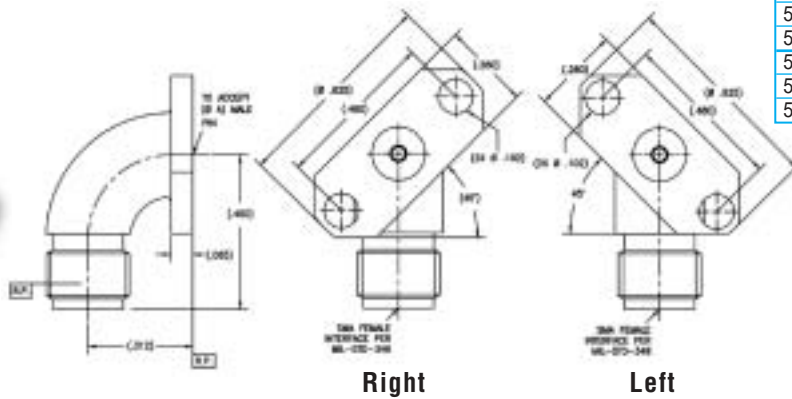


Tensolite Part No.	"A" ± .001
5530-1CC	.0360
5530-2CC	.0200
5530-3CC	.0100

Center conductor is captivated.

## 5659, 5660

Radius right angle two hole  
flange mount female

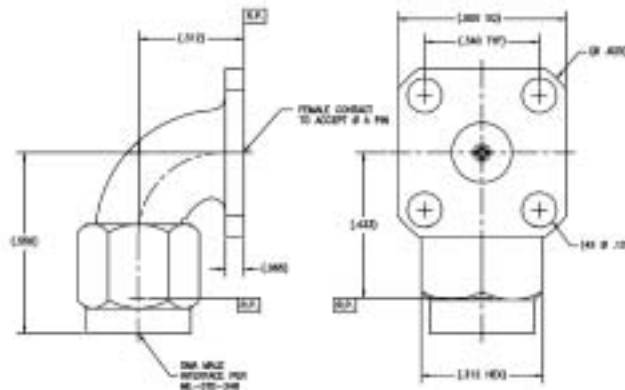


Tensolite Part No.	"A" ± .001	Flange Position
5659-1CC	.0360	45° Left
5659-2CC	.0200	45° Left
5659-3CC	.0100	45° Left
5660-1CC	.0100	45° Right
5660-2CC	.0100	45° Right
5660-3CC	.0100	45° Right

Center conductor is captivated.

## 5902

Radius right angle  
flange mount male

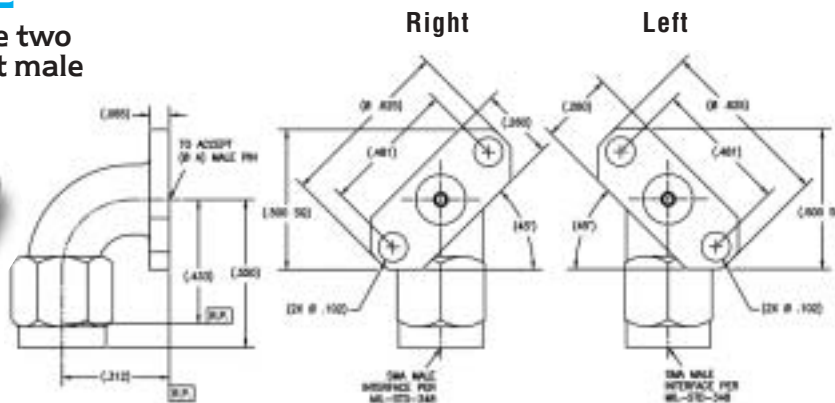


Tensolite Part No.	"A" ± .001
5902-1CC	.0360
5902-2CC	.0200
5902-3CC	.0100

Center conductor is captivated.

## 5631, 5632

Radius right angle two hole  
flange mount male



Tensolite Part No.	"A" ± .001	Flange Position
5631-1CC	.0360	45° Right
5631-2CC	.0200	45° Right
5631-3CC	.0100	45° Right
5632-1CC	.0360	45° Left
5632-2CC	.0200	45° Left
5632-3CC	.0100	45° Left

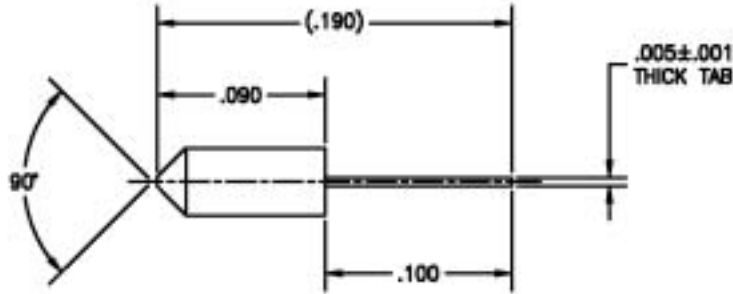
Center conductor is captivated.



# SMA Bulkhead & Panel Mount Female Contact Terminations

## 1345-1

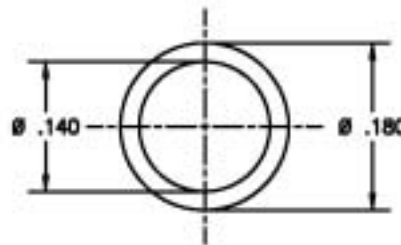
Center conductor



Tensolite Part No.	"A"	"B"
1345-1	.036	.020
1345-2	.036	.050
1345	.020	.020

# SMA EMI/RFI Gaskets

## 1604-11



Tensolite Part No.	"A"	"B"
1604-11	.180	.140

Material: Conductive Silver/Silicone Elastomers

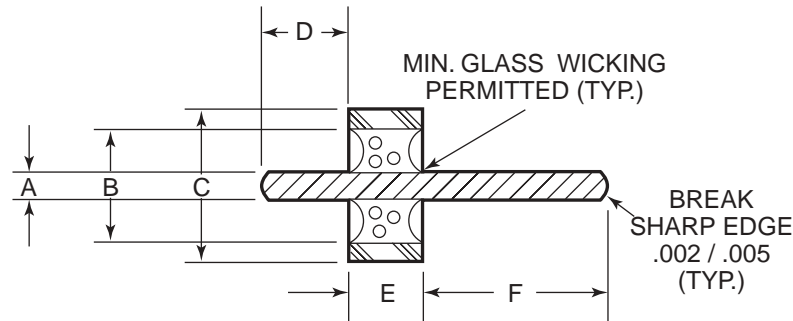
# SMA Solder and Braze-in Hermetic Seal

## 4004



Tensolite Part No.	"A"	"B"	"C"	"D"	"E"	"F"
4004-5	.0120±.0005	.078 (REF.)	.0985±.0015	.079/.065	.0625±.0025	.180
4004-9	.0150±.0005	.082 (REF.)	.0985±.0015	.079/.065	.0630±.0025	.180
4004-11	.0180±.0005	.099 (REF.)	.1115±.0015	.079/.065	.0625±.0025	.180
4004-13	.0200±.0005	.129 (REF.)	.1580±.0015	.067/.053	.0625±.0025	.205

Glass Seal Assembly Material and Finishes:  
Outer Ring & Pin: Kovar, gold plated per MIL-G-45204, Type II, Class I, Grade C  
Glass Bead: #7052



# SMA Bulkhead & Panel Mount Hermetically Sealed Connectors

## 5961CC, 5962CC, 5964CC, 5967CC

Bulkhead feed through female  
hermetically sealed

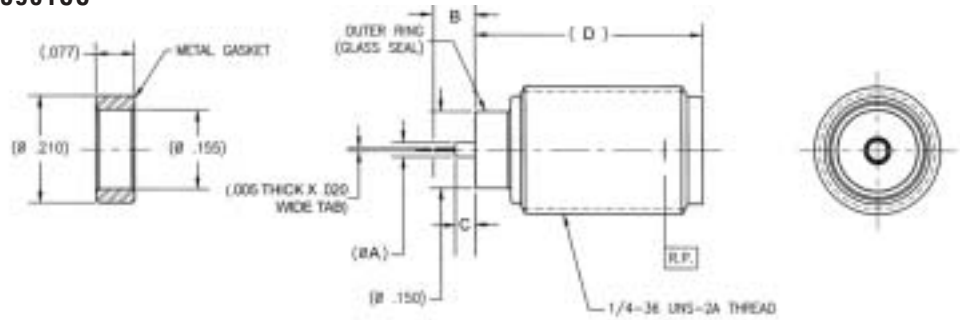
Tensolite Part No.	Ø "A"	"B"	"C"	"D"
5961CC	.028	.080	.040	.451
5962CC	.028	.080	.040	.451
5964CC	.064	.080	.040	.451
5967CC	.020	.115	—	.500

Center contact is captivated.

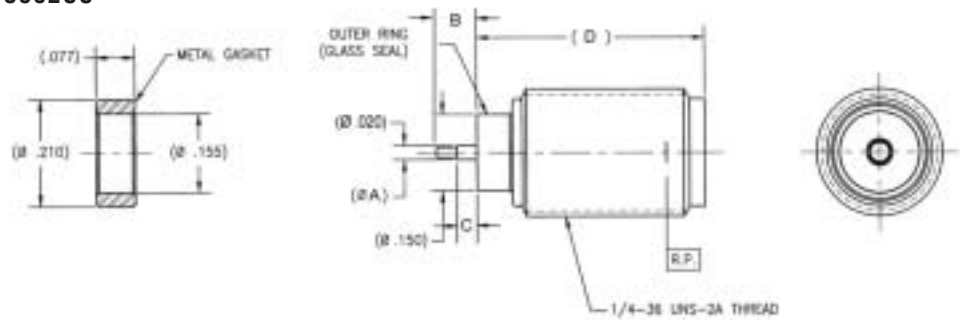


5964CC

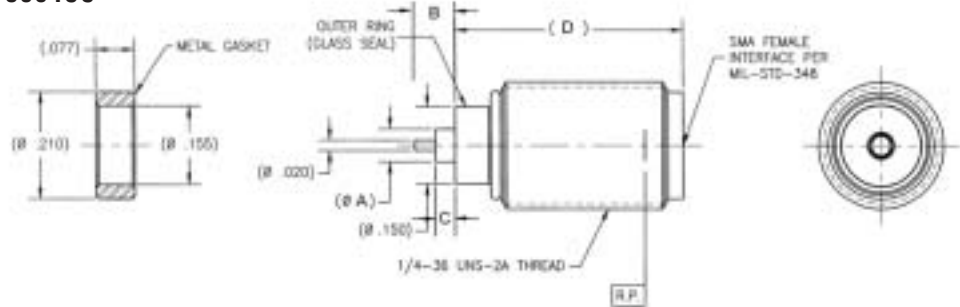
### 5961CC



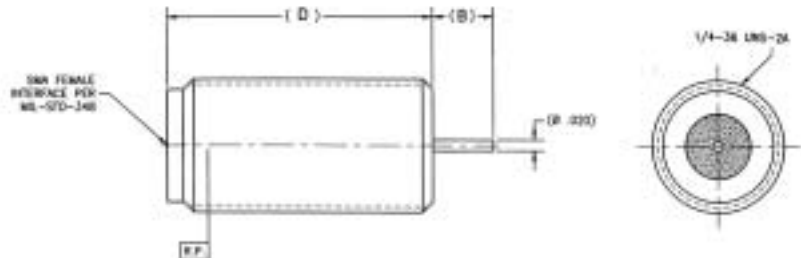
### 5962CC



### 5964CC



### 5967CC



SMA Bulkhead & Panel Mount Hermetically Sealed Connectors

# SMA Bulkhead & Panel Mount Hermetically Sealed Connectors

## 5971CC, 5972

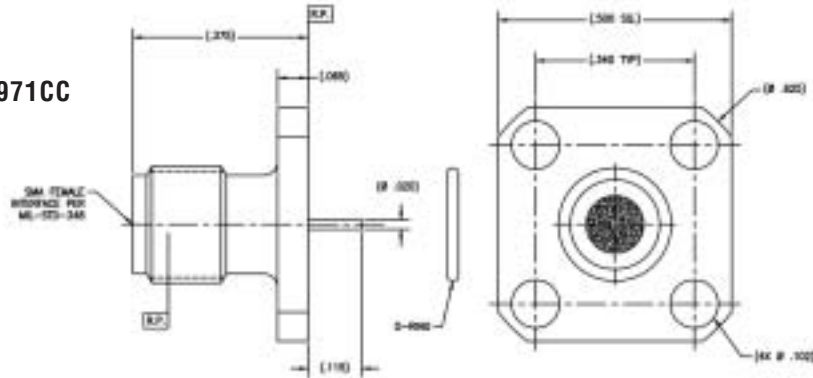
Flange mount SMA female hermetically sealed

Tensolite Part No.	"A"	"B"
5971CC	—	.490
5972-1CC	.093	.583
5972-2CC	.125	.615
5972-3CC	.187	.677

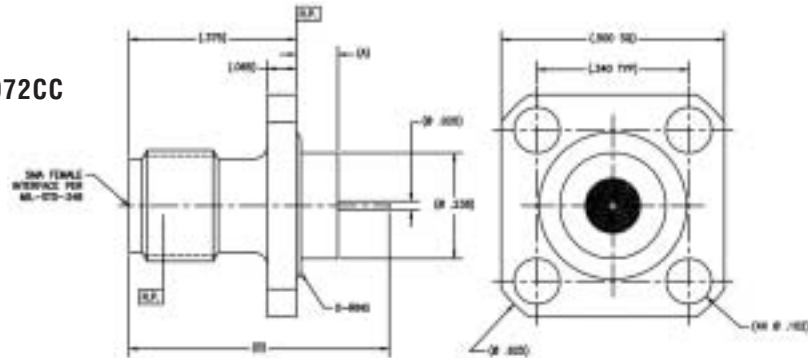
Center contact is captivated.



5971CC



5972CC



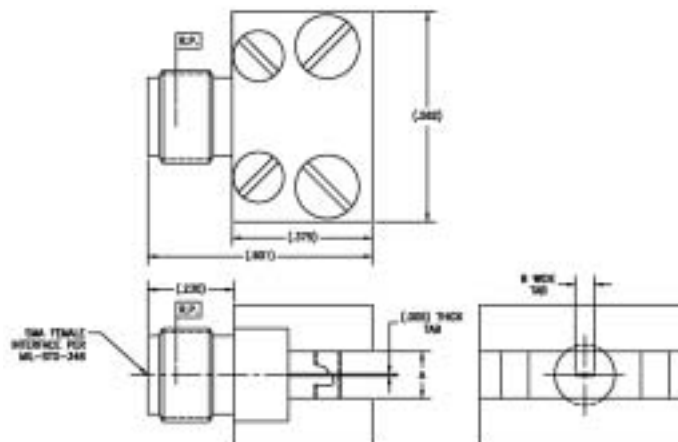
# SMA Strip Transmission Line Terminations

## 5246

Edge mount female stripline

Tensolite Part No.	"A"	"B"
5246-1	.062	.025
5246-2	.125	.050
5246-3	.250	.050

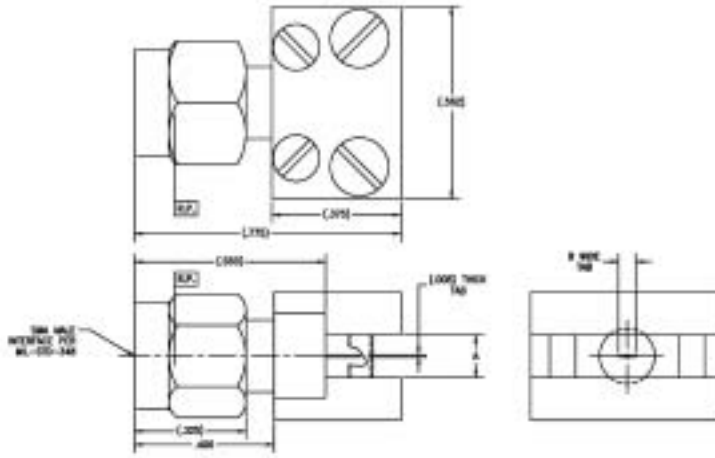
Add suffix CC to part number for captivated contact.



# SMA Strip Transmission Line Terminations

## 5361

Edge mount male stripline

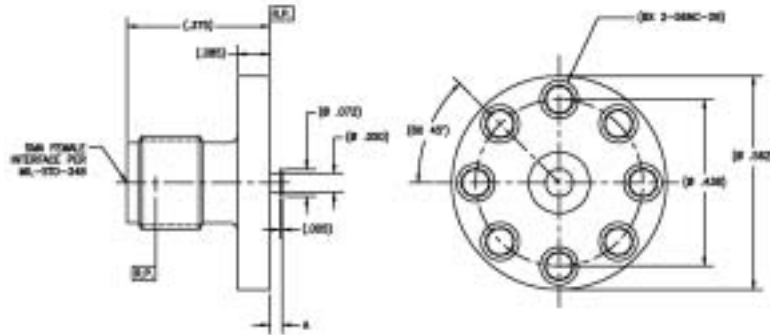


Tensolite Part No.	"A"	"B"
5361-1	.062	.025
5361-2	.125	.050
5361-3	.250	.050

Add suffix CC to part number for captivated contact.

## 5240

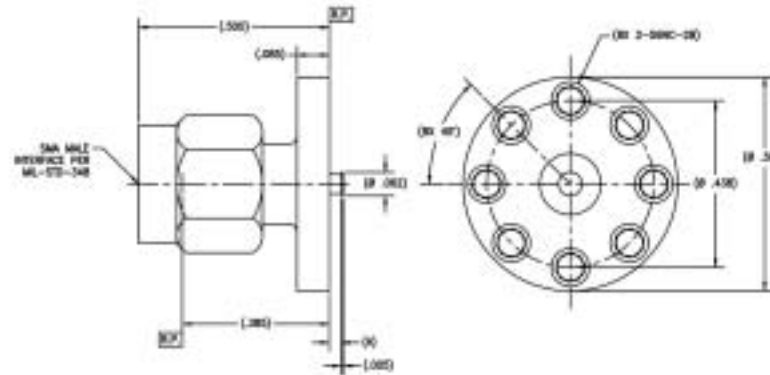
Surface mount female stripline



Tensolite Part No.	"A"
5240-1	.032
5240-2	.062
5240-3	.094
5240-4	.125

## 5320

Surface mount male stripline



Tensolite Part No.	"A"
5320-1	.032
5320-2	.062
5320-3	.094
5320-4	.125









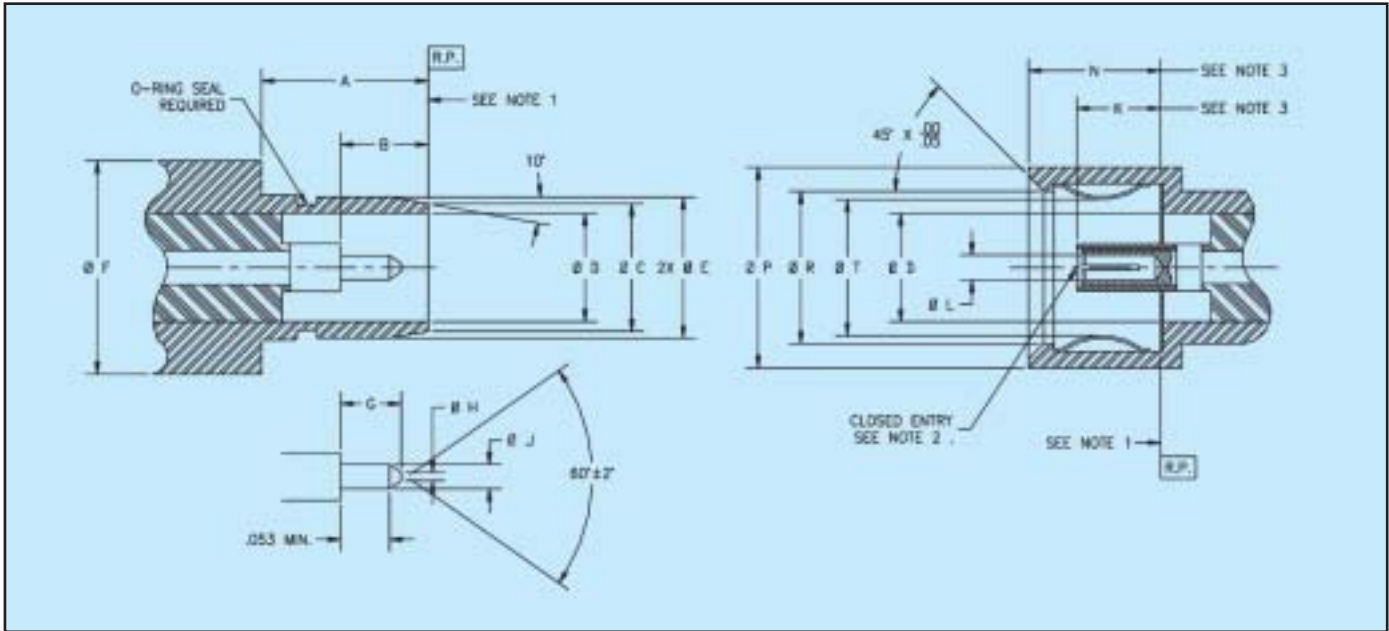
# BMA Series



BMA Series



# BMA Interface Mating Dimensions (Per MIL-STD-348)



## MALE

LTR	Minimum		Nominal		Maximum	
	in	mm <sup>5</sup>	in	mm <sup>5</sup>	in	mm <sup>5</sup>
A	.198	5.03	----	----	----	----
B	.128	3.25	----	----	----	----
Ø C	----	----	.192	4.88	----	----
Ø D	----	----	.161	4.08	----	----
Ø E	.209	5.30			.211	5.35
Ø F	----	----	.300	7.62	----	----
G	----	----	.090	2.29	----	----
Ø H	----	----	----	----	.015	0.38
Ø J	.0354	0.899	----	----	.0370	0.940

## FEMALE

LTR	Minimum		Nominal		Maximum	
	in	mm <sup>5</sup>	in	mm <sup>5</sup>	in	mm <sup>5</sup>
Ø D	----	----	.161	4.08	----	----
K	----	----	----	----	.127	3.22
Ø L <sup>2</sup>	See Note 2					
N <sup>3</sup>	----	----	----	----	.198	4.95
Ø P	.290	7.37	----	----	----	----
Ø R	.225	5.71	----	----	----	----
Ø T	----	----	----	----	.200	5.08

**Note(s):**

1. Reference Plane
2. Bore diameter closed to meet electrical and mechanical requirements when mated with a 0.0355/0.0370 inch (0.902/0.940) pin.
3. With spring finger bottomed.
4. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.

# BMA Specifications

The specifications below are general specifications for all BMA connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from

the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per ZZ-R-765, CLASS IIB, 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-486, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megaohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	Engage: 3.0 lbs. Max Disengage: 1.5 lbs. Max.
Misalignment	± .020 Radial Float .060 min. Axial Float
Center Contact Retention	6.0 lbs. Minimum
Cable Retention Force	Refer to applicable military slash sheet or consult factory.
Mating Characteristics	See interface dimensions shown. Applicable to females only: oversize pin .0372 +.0001/- .0000 diameter .030/.045 deep, 3 insertions; insertion force 3 lbs. maximum with .0370 +.0001/- .0000 diameter pin, .050/.075 deep; withdrawal force 1 oz. minimum with .0355 +.0000/- .0001 maximum diameter pin, .050/.075 deep.
Connector Durability	5000 cycles. The connector shall meet the mating characteristic requirements.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

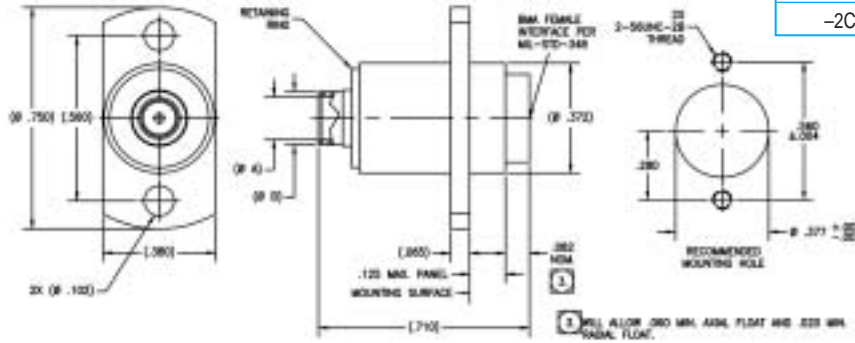
Complete specifications on every connector in this catalog are available from the factory.



# BMA Panel Mount

## 623

BMA female 2 hole flange float mount to Semi-Rigid cable



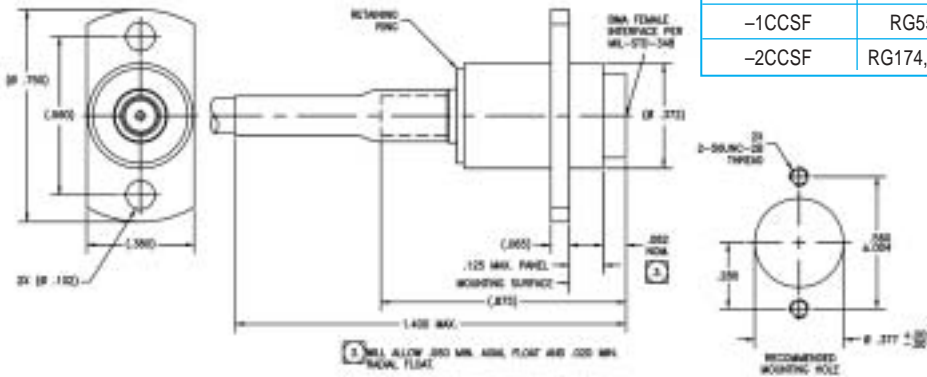
Tensolite Part No	(Ø A)	(ØB)
-1CCSF	.145	.180
-2CCSF	.086	.120

Center conductor is captivated  
SF designates passivated finish.

Consult factory for Assembly Instructions

## 624

BMA female 2 hole flange float mount to flex cable



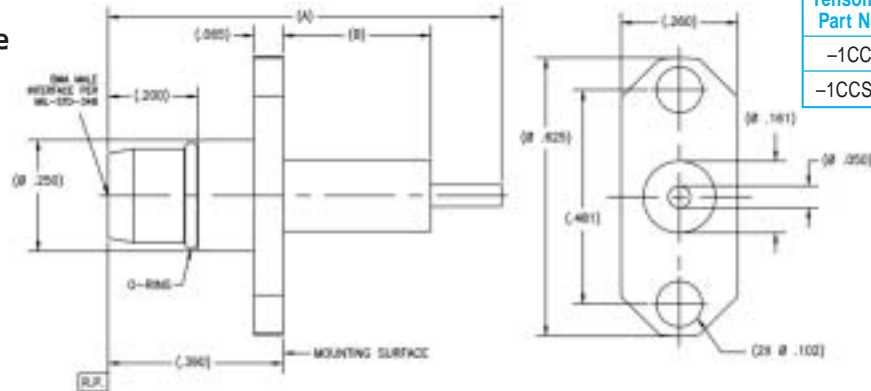
Tensolite Part No	Flex Cable
-1CCSF	RG55, 142, 233, 400
-2CCSF	RG174, 179, 187, 188, 316

Center conductor is captivated  
SF designates passivated finish

Consult factory for Assembly Instructions

## 640

BMA male 2 hole flange (.260 X .625) mount to straight termination

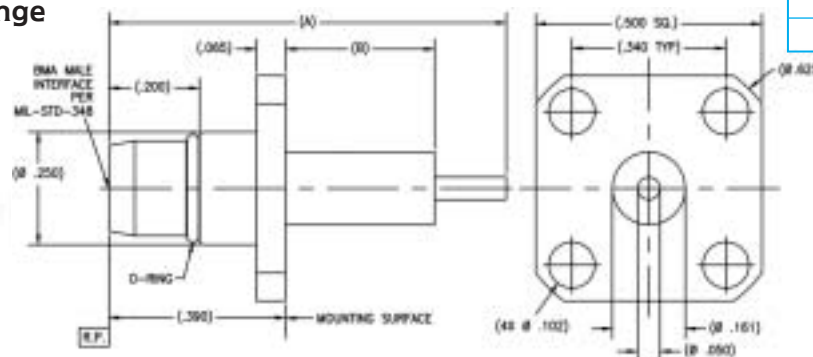


Tensolite Part No	(A)	(B)
-1CC	.878	.330
-1CCSF	.878	.330

Center conductor is captivated  
Standard units are gold finish  
SF designates passivated finish

## 641

BMA male 4 hole flange (.500 SQ.) mount to straight termination



Tensolite Part No	(A)	(B)
-1CC	.878	.330
-1CCSF	.878	.330

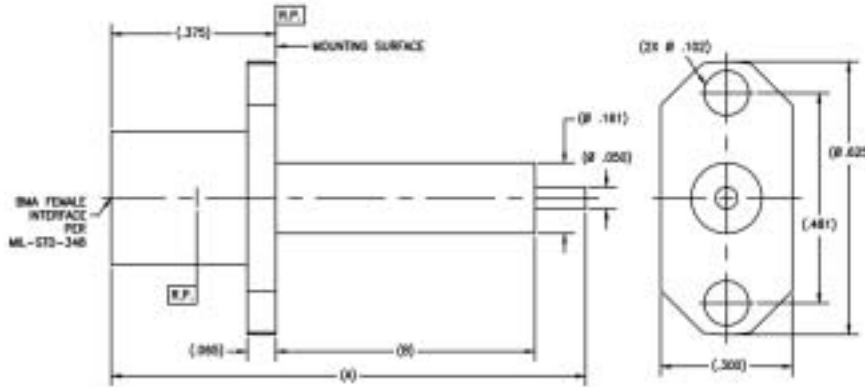
Center conductor is captivated  
Standard units are gold finish  
SF designates passivated finish



# BMA Flange Mount

## 642

BMA female 2 hole flange (.300 x .625) mount to straight termination

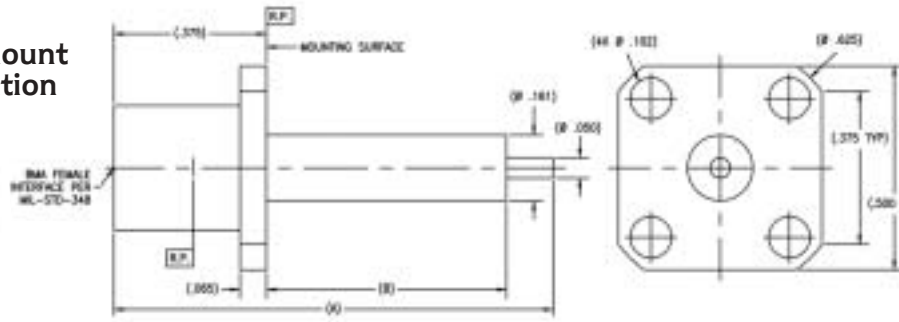


Tensolite Part No	(A)	(B)
-1CC	1.080	.590
-1CCSF	1.080	.590

Center conductor is captivated  
Standard units are gold finish  
SF designates passivated finish

## 643

BMA female 4 hole flange (.500 SQ.) mount to straight termination



Tensolite Part No	(A)	(B)
-1CC	1.080	.590
-1CCSF	1.080	.590

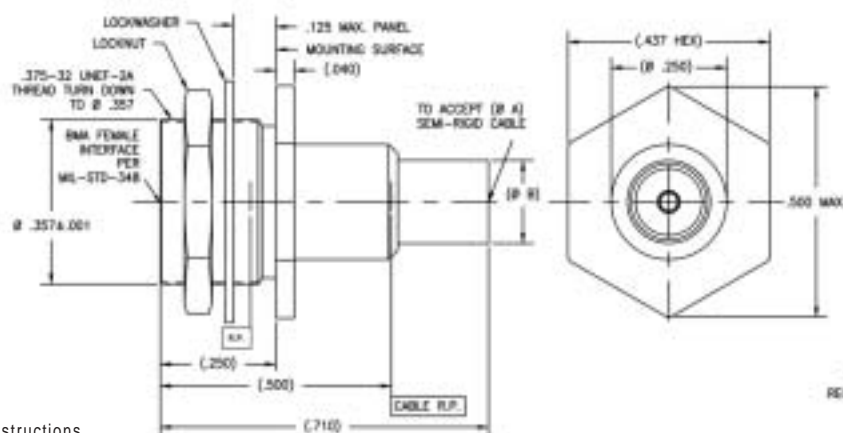
Center conductor is captivated  
Standard units are gold finish  
SF designates passivated finish

BMA Flange Mount & Bulkhead Mount

# BMA Bulkhead mount

## 621

BMA female bulkhead fixed rear mount to Semi-Rigid cable



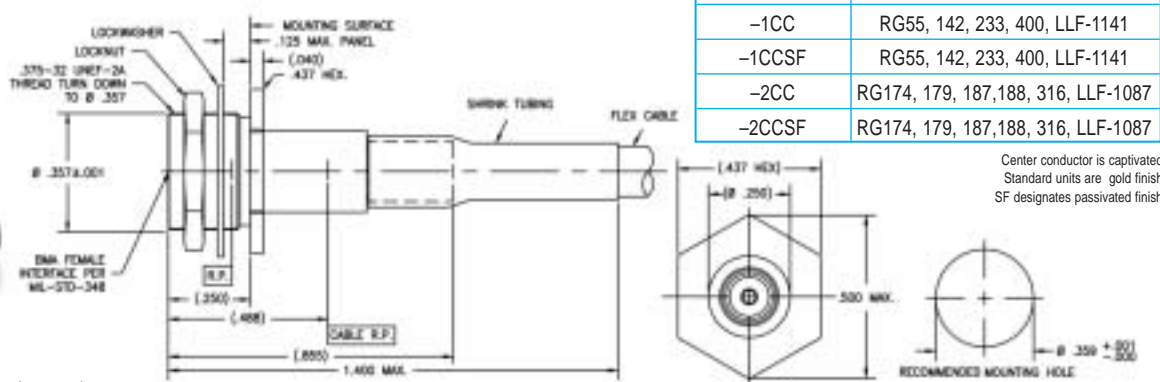
Tensolite Part No	(ØA)	(ØB)
-1CC	.141	.180
-2CC	.085	.120
-3CC	.141*	.180

Center conductor is captivated  
Standard units are gold finish  
\*Microporous

Consult factory for Assembly Instructions

## 622

BMA female bulkhead fixed rear mount to flex cable



Tensolite Part No	Flex Cable
-1CC	RG55, 142, 233, 400, LLF-1141
-1CCSF	RG55, 142, 233, 400, LLF-1141
-2CC	RG174, 179, 187, 188, 316, LLF-1087
-2CCSF	RG174, 179, 187, 188, 316, LLF-1087

Center conductor is captivated  
Standard units are gold finish  
SF designates passivated finish

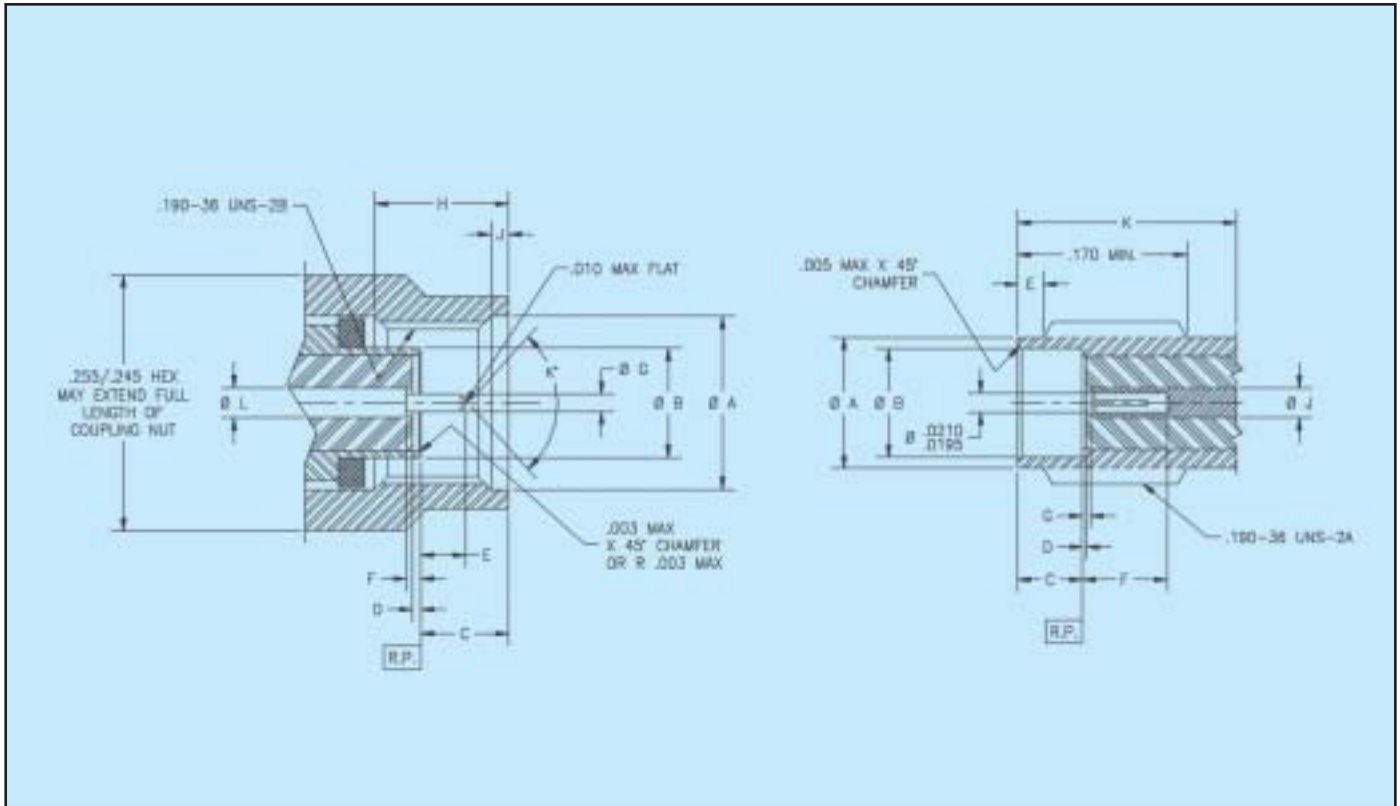
Consult factory for Assembly Instructions

# SSMA Series



SSMA Series

# SSMA Interface Mating Dimensions (Per MIL-STD-348)



## MALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
∅ A	.196	4.98	.202	5.13
∅ B	.1240	3.15	.1268	4.27
C	.100	2.54	.133	3.38
D	.000	0.00	.010	0.25
E	.050	1.27	.065	1.65
F	0.00	0.00	.010	0.25
∅ G	.0195	0.05	.0208	0.53
H	.130	3.30	---	---
J	.015	0.28	.045	1.14
K°	70°	70°	90°	90°
L	.0335	0.85	.0348	0.88

## FEMALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
∅ A	.147	3.73	.150	3.81
∅ B	.127	3.23	.130	3.30
C	.075	1.91	.077	1.96
∅ D	.000	0.00	.010	0.25
E	.020	0.51	.040	1.02
F	.075	1.91	---	---
G	.000	0.00	.010	0.25
∅ J	.0335	0.85	.0348	0.88
K	.230	5.84	---	---

### Note(s):

- Dimensions are in inches.
- Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.

The specifications below are general specifications for all SSMA connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

In the event of any conflict between these specifications and General Specification MIL-PRF-39012 and MIL-PRF-83517, these specifications shall govern. These specifications are subject to change according to the latest revision of General Specification MIL-PRF-39012 and MIL-PRF-83517.

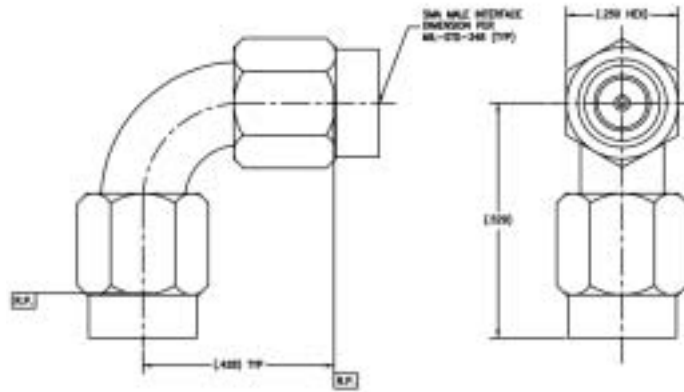
Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 or D-1710 Silicone Rubber per ZZ-R-765, CLASS IIB, 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 10,000 megohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 2 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	60 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	15 in.-lbs. minimum. Applicable to male connectors only.
Cable Retention Force	Refer to applicable military slash sheet or consult factory.
Mating Characteristics	See interface dimensions shown. Applicable to females only; oversize pin .0213 +.0001/-.0000 diameter .030/.045 deep; Insertion force 3 lbs. maximum with .0208 +.0001/-.0000 diameter pin; withdrawal force 1 oz. minimum with .0195 maximum diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Recommended Mating Torque	5 inch-pounds.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megohms min. within 5 minutes after removal from humidity.



# SSMA Adapters

## 3053

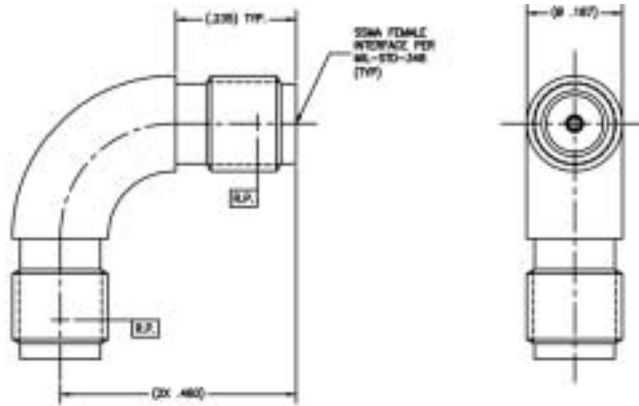
SSMA male to male  
R/A adapter



Add suffix CC to Part No. for captivated contact.

## 3052

SSMA female to  
female R/A adapter

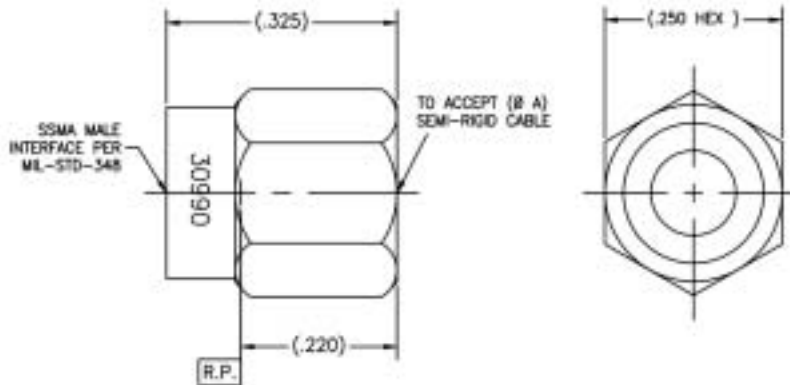


Add suffix CC to Part No. for captivated contact.

# SSMA Cable Connectors

## 3001

SSMA male to  
Semi-Rigid cable  
(w/o contact)



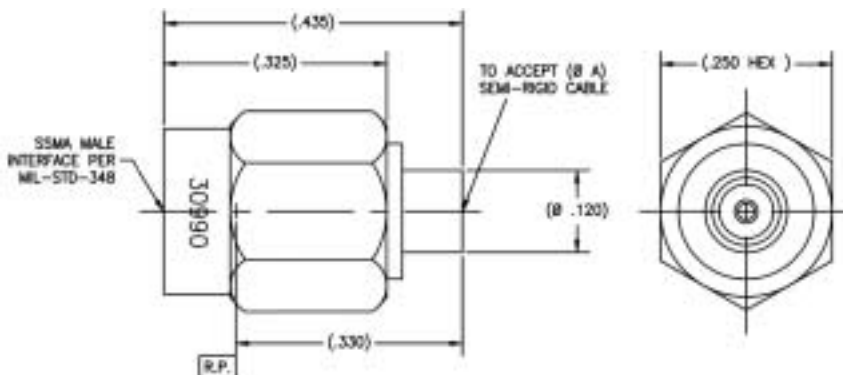
Tensolite Part No.	(Ø A)
-1	.085
-1SF	.085

Standard units are gold finish  
SF designates passivated finish

Consult factory for Assembly Instructions

## 3002

SSMA male to  
Semi-Rigid cable  
(w/contact)



Tensolite Part No.	(Ø A)
-1	.085
-1SF	.085

Standard units are gold finish  
SF designates passivated finish

Consult factory for Assembly Instructions

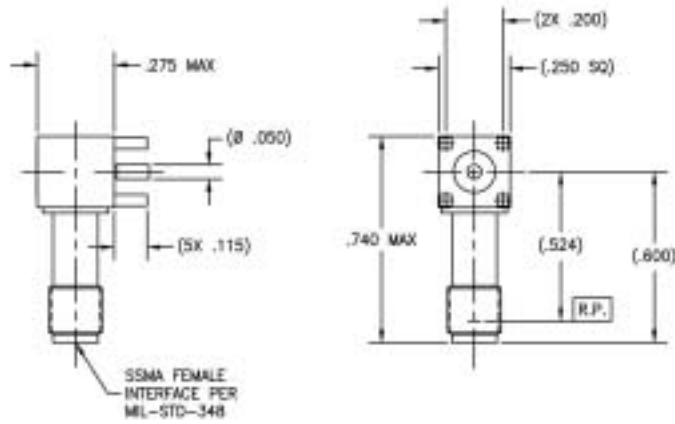
SSMA Adapters & Cable Connectors

# SSMA Cable Connectors

## 3035CC

SSMA female right angle PCB mount, center contact is captivated

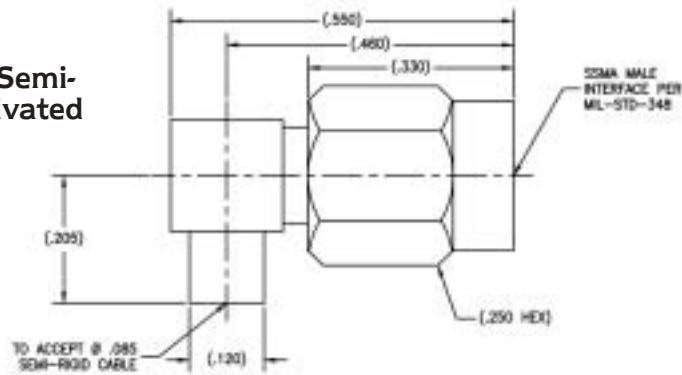
Center conductor is captivated



## 3065CC

SSMA male right angle to Ø .085 Semi-Rigid cable center contact is captivated

Center conductor is captivated



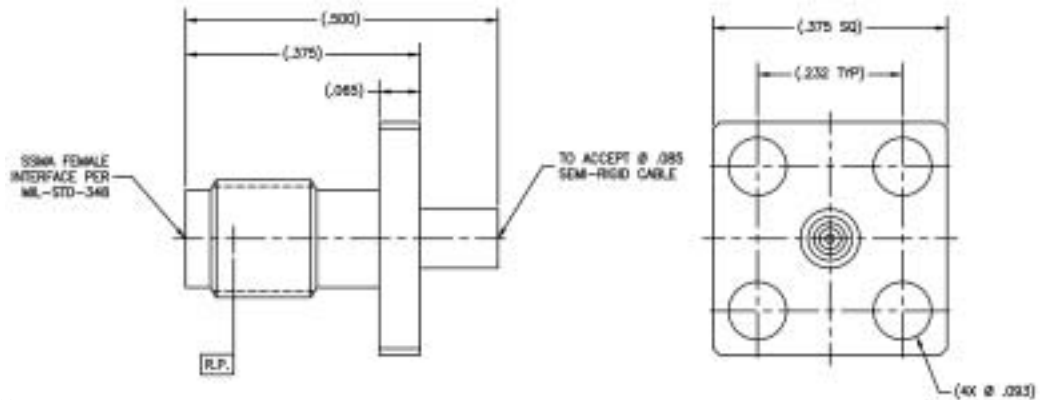
Consult factory for Assembly Instructions

# SSMA Bulkhead and Panel Mount

## 3005

SSMA female 4 hole flange mount

Add suffix CC to Part No. for captivated contact.

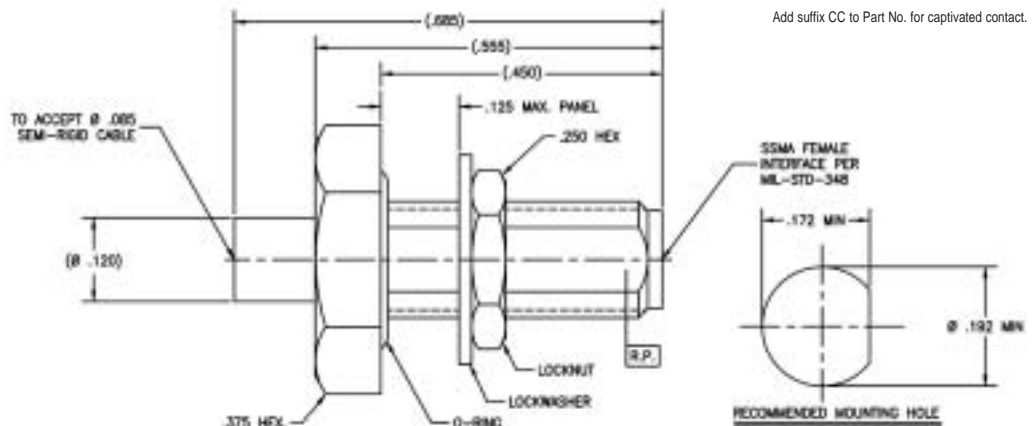


Consult factory for Assembly Instructions

## 3004

SSMA female bulkhead mount to Ø .085 S/R cable

Add suffix CC to Part No. for captivated contact.



Consult factory for Assembly Instructions

SSMA Cable Connectors,  
Bulkhead & Panel Mount

Tensolite

A CARLISLE Company

Call: 866-282-4708

Website: [www.tensolite.com](http://www.tensolite.com)

Standard units are gold plated. Add suffix SF to Part Number for stainless steel finish.



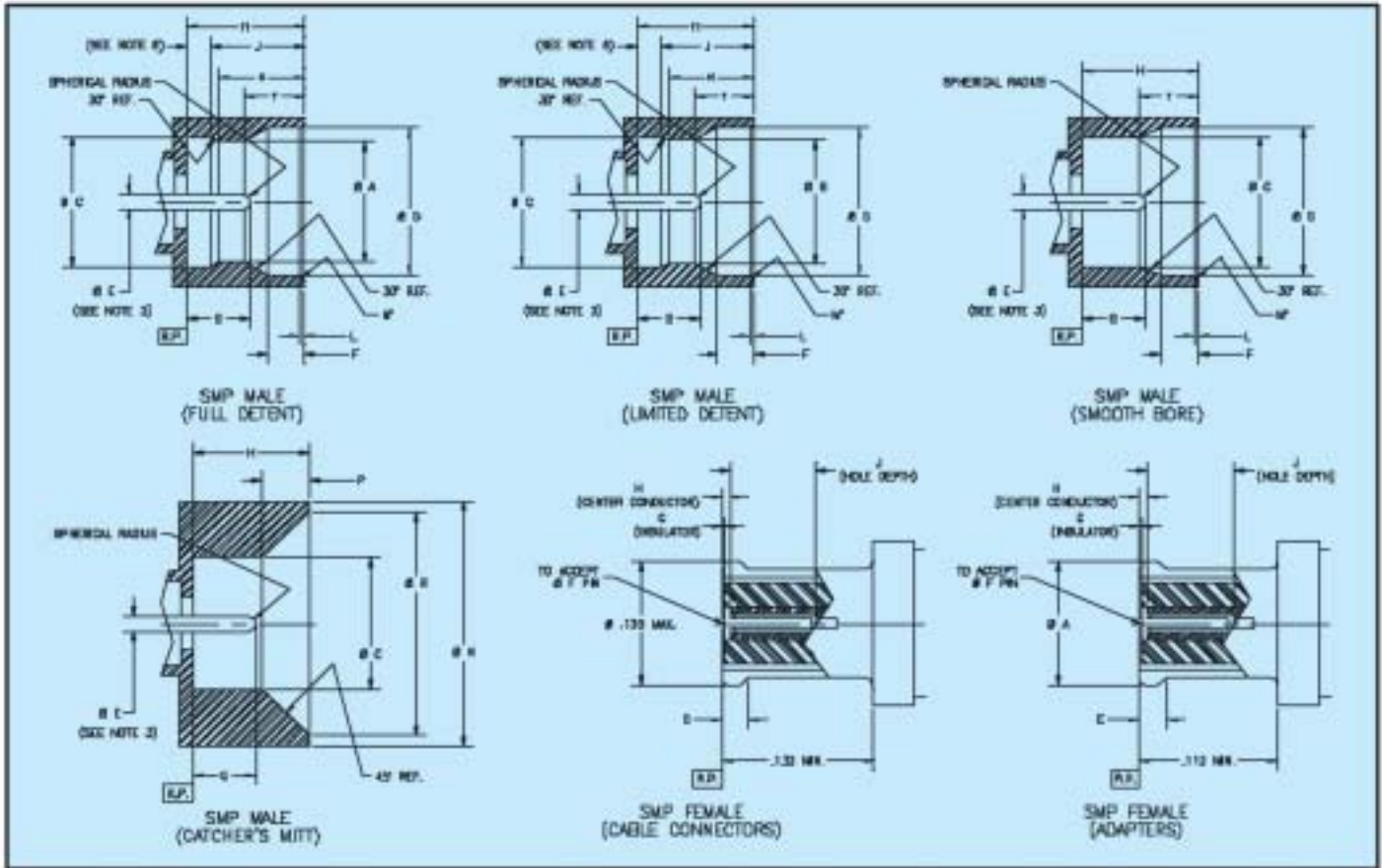
# SMP Series



SMP Series



# SMP Interface Mating Dimensions (Per MIL-STD-348)



## MALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
∅ A	.114	2.90	.118	3.00
∅ B	.118	3.00	.122	3.10
∅ C	.123	3.12	.127	3.23
∅ D	.139	3.53	.145	3.68
∅ E	.014	0.36	.016	0.41
F	.033	0.84	.037	0.94
G	.045	1.14	.055	1.40
H	.108	2.74	.112	2.84
J	.086	2.18	.090	2.29
K	.078	1.98	.082	2.08
L	.003	0.08	----	----
M <sup>°</sup>	40 <sup>°</sup>	40 <sup>°</sup>	50 <sup>°</sup>	50 <sup>°</sup>
∅ N	.230	5.84	.240	6.10
P	.043	1.09	.047	1.19
∅ R	.210	5.33	.220	5.59
T	.055	1.40	.057	1.45

## FEMALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
∅ A	----	----	.135	3.43
B	.132	3.35	----	----
C	.112	2.84	----	----
D	.025	0.64	.035	0.89
E	.018	0.46	.025	0.64
∅ F	.014	0.36	.016	0.41
G <sup>2</sup>	.000	0.00	-.010	0.25
H <sup>5</sup>	.000	0.00	-.008	0.20
J	.070	1.78	----	----

### Note(s):

- Dimensions are in inches.
- Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
- Pin is not supplied with shroud.
- Dielectric insulator gap is measured from connector body reference plane .000 in. max. above (flush) to .010 in. max. below.
- Center conductor gap is measured from connector body reference plane .000 in. max. above (flush) to .008 in. max. below.
- Dimension to mating interface shall be .018/.025 for adapters and .025/.035 for cable connectors.

The specifications below are general specifications for all SMP connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

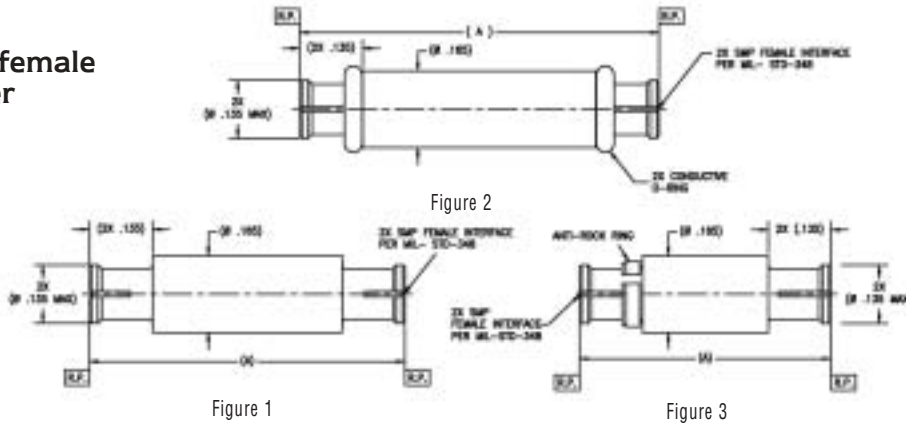
In the event of any conflict between these specifications and DSCC 94007 and DSCC 98004, these specifications shall govern. These specifications are subject to change according to the latest revision of Specification DSCC 94007 and DSCC 98004.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per ZZ-R-765, CLASS IIB, 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	Engage: 15.0 lbs. max., Full Detent 5.0 lbs. max., Limited Detent 2.0 lbs. max., Smooth Bore and Catcher's Mitt Disengage: 5.0 lbs. min., Full Detent 1.5 lbs. min., Limited Detent 0.5 lbs. min., Smooth Bore and Catcher's Mitt
Misalignment	+/- .020 Radial, .000/.010 Axial
Cable Retention Force	Consult factory.
Mating Characteristics	Female only: 1/4 oz. min. withdrawal with .0140 - .0000+ .0002 diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to : 100 mating cycles min. for Full Detent; 500 mating cycles min. for Limited Detent; and 5000 mating cycles min. for Smooth Bore and Catcher's Mitt. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B. No measurement at high humidity.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megohms min. within 5 minutes after removal from humidity.

# SMP In-Series Adapters

## P617

SMP female to female straight adapter

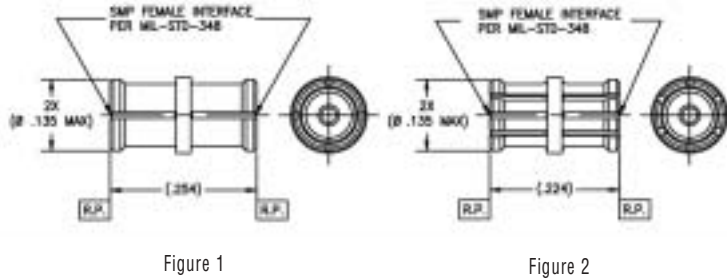


Tensolite Part No.	"A"	Fig.
P617-1CC	.769	1
P617-2CC	.851	1
P617-3CC	1.366	1
P617-4CC	.440	2
P617-5CC	.769	2
P617-6CC	.415	1
P617-7CC	.428	1
P617-8CC	.539	3

Center conductor is captivated  
Standard units are gold finish

## P650

SMP female to female straight adapter

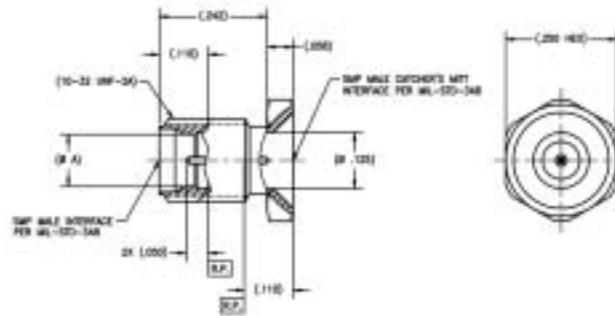


Tensolite Part No.	Fig.
P650-1CC	1
P650-2CC	2

Center conductor is captivated  
Standard units are gold finish

## P912

SMP male bulkhead straight to SMP male catcher's mitt adapter



Tensolite Part No.	Interface	"ØA"
P912-1CCSF	Full detent	.116
P912-2CCSF	Limited detent	.120
P912-3CCSF	Smooth bore	.125

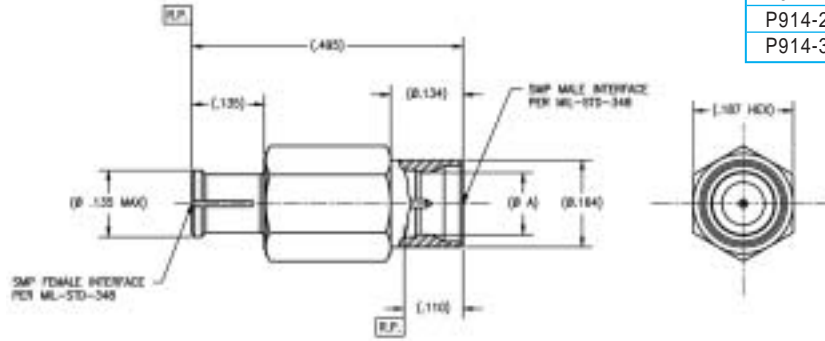
Center conductor is captivated  
Standard finish is passivated.

SMP In-Series Adapters

# SMP In-series Adapters

## P914

SMP male straight to SMP female adapter

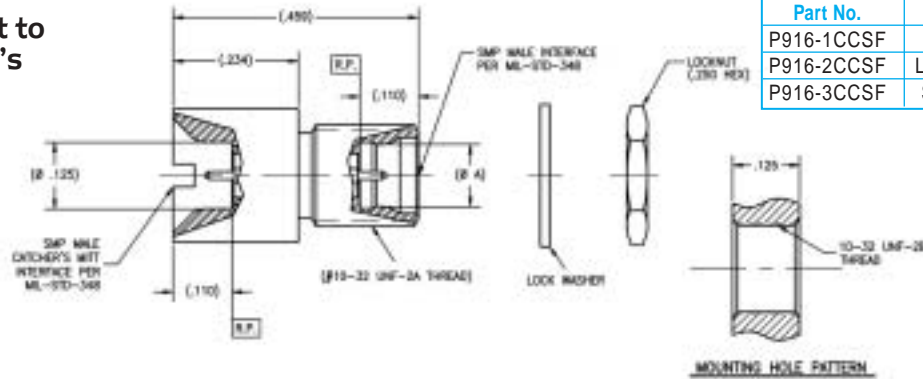


Tensolite Part No.	Interface	"ØA"
P914-1CC	Full detent	.116
P914-2CC	Limited detent	.120
P914-3CC	Smooth bore	.125

Center conductor is captivated  
Standard units are gold finish

## P916

SMP male straight to SMP male catcher's mitt adapter

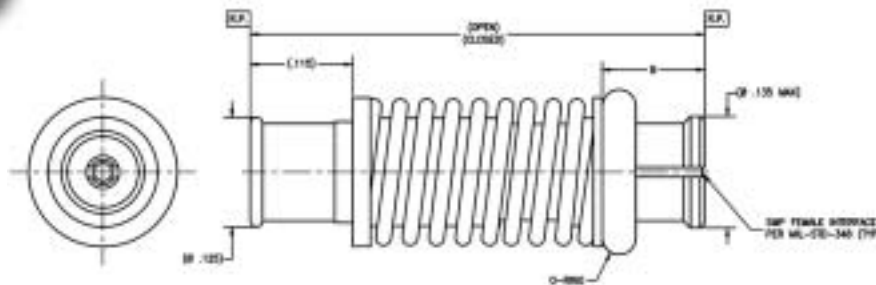


Tensolite Part No.	Interface	"ØA"
P916-1CCSF	Full detent	.116
P916-2CCSF	Limited detent	.120
P916-3CCSF	Smooth bore	.125

Center conductor is captivated.  
Standard finish is passivated.

## P922

SMP female bullet spring loaded straight to SMP female adapter



Tensolite Part No.	(open)	(closed)	B	O-ring
P922-2CC	(.510)	(.460)	(.115)	Not required
P922-3CC	(.745)	(.695)	(.115)	Not required
P922-4CC	(.660)	(.610)	(.135)	Required
P922-5CC	(1.000)	(.950)	(.135)	Required
P922-6CC	(1.376)	(1.326)	(.115)	Not required

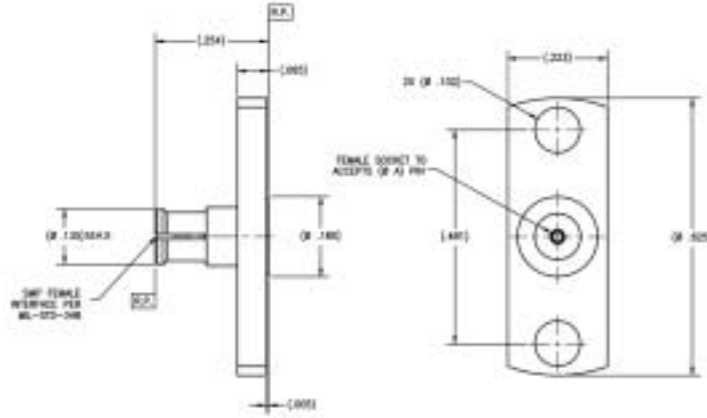
Center conductor is captivated  
Standard units are gold finish



# SMP Field Replaceable Connectors

## P835

SMP female 2 hole flange mount field replaceable



Tensolite Part No.	"A"
P835-1CC	.012
P835-2CC	.015
P835-3CC	.018

Center conductor is captivated  
Standard units are gold finish

## P836

SMP male detent 2 hole flange mount field replaceable

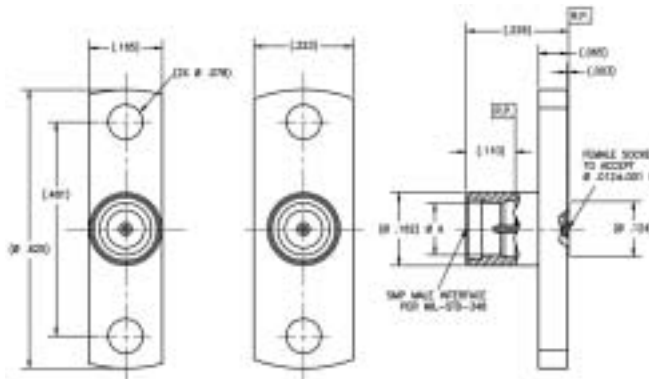


Figure 1

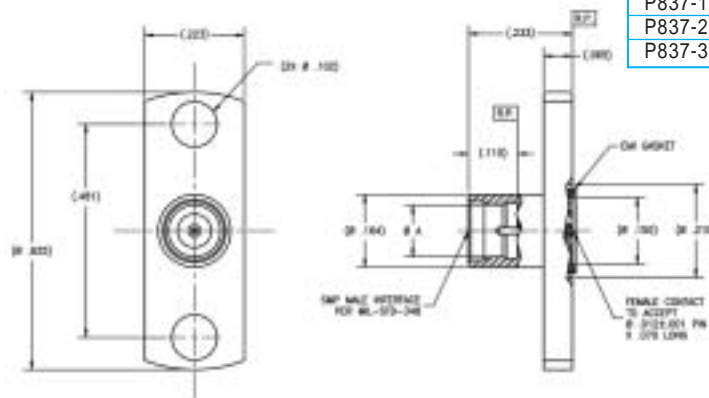
Figure 2

Tensolite Part No.	Interface	"A"	Fig.
P836-1CCSF	Full detent	.116	1
P836-2CCSF	Limited detent	.120	1
P836-3CCSF	Smooth bore	.125	1
P836-4CCSF	Full detent	.116	2
P836-5CCSF	Limited detent	.120	2
P836-6CCSF	Smooth bore	.125	2

Center conductor is captivated  
Standard finish is passivated.

## P837

SMP male 2 hole flange mount field replaceable with EMI gasket

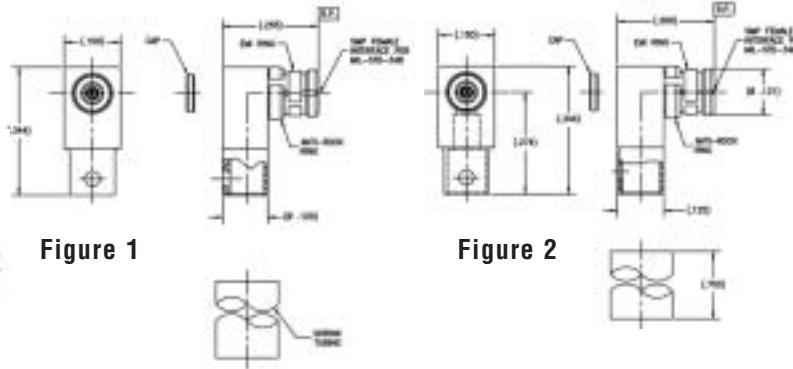


Tensolite Part No.	Interface	"ØA"
P837-1CCSF	Full detent	.116
P837-2CCSF	Limited detent	.120
P837-3CCSF	Smooth bore	.125

Center conductor is captivated  
Standard finish is passivated.

## P600

SMP female right angle to flexible cable (18.0 GHz version)



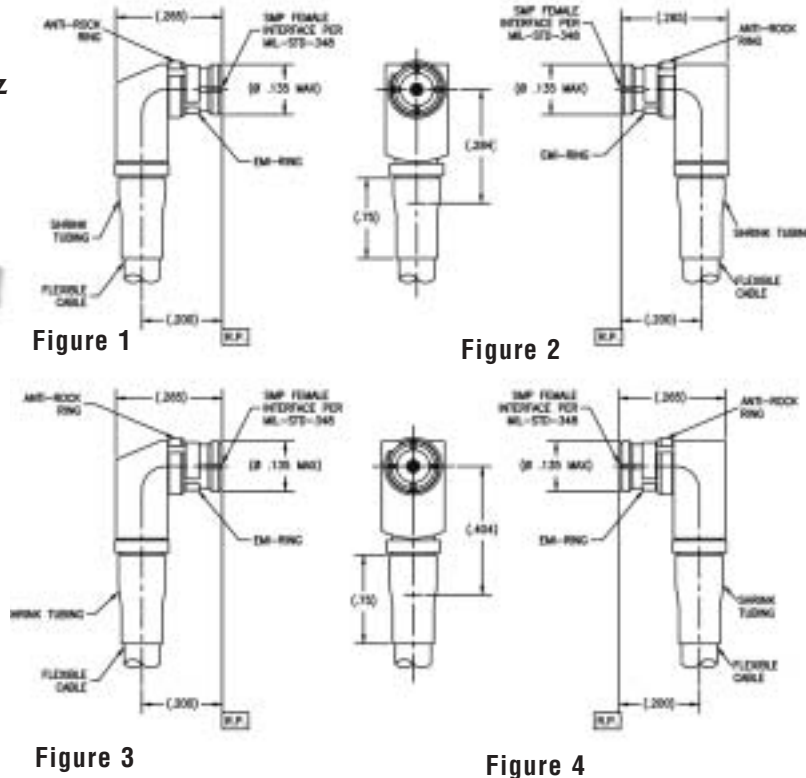
Tensolite Part No.	Cable Types	Fig.
P600-1CC	RG178	1
P600-2CC	RG316	1
P600-3CC	RD178	1
P600-4CC	RD316	2
P600-9CC	LLF1087	1

Center conductor is captivated  
Standard units are gold finish

Consult factory for Assembly Instructions

## P601

SMP female right angle connector for flex cable (26.5 GHz version)



Tensolite Part No.	Cable Types	Fig.
P601-1CC	RG178	3
P601-2CC	RG316	3
P601-3CC	RD178	3
P601-4CC	RD316	3
P601-9CC	LLF1087	1
P601-11CC	RG178	4
P601-12CC	RG316	4
P601-13CC	RD178	4
P601-14CC	RD316	4
P601-19CC	LLF1087	2
P601-21CC	LLFP1087	3
P601-22CC	LLFP1087	4

Center conductor is captivated  
Standard units are gold finish

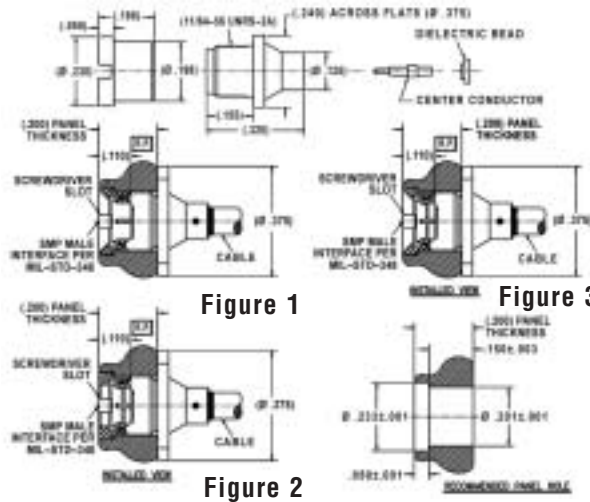
Consult factory for Assembly Instructions



# SMP Semi-Rigid Cable Connectors

## P662

SMP male bulkhead panel mount to Semi-Rigid cable



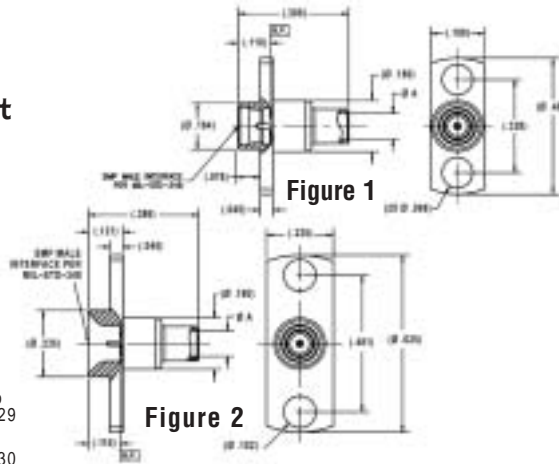
Tensolite Part No.	Interface	Fig.	Cable Types
P662-1CC	Catcher's Mitt	1	Ø .047 S/R
P662-2CC	Catcher's Mitt	1	Ø .085 S/R
P662-3CC	Catcher's Mitt	1	Ø .047 L/L
P662-4CC	Catcher's Mitt	1	Ø .085 L/L
P662-5CC	Full Detent	2	Ø .047 S/R
P662-6CC	Full Detent	2	Ø .085 S/R
P662-7CC	Full Detent	2	Ø .047 L/L
P662-8CC	Full Detent	2	Ø .085 L/L
P662-9CC	Limited Detent	2	Ø .047 S/R
P662-10CC	Limited Detent	2	Ø .085 S/R
P662-11CC	Limited Detent	2	Ø .047 L/L
P662-12CC	Limited Detent	2	Ø .085 L/L
P662-13CC	Limited Detent	3	Ø .085 S/R

Center conductor is captivated  
Standard units are gold finish

Refer to Assembly Instruction 313 & 314 on pages 225,226 & 227, 228

## P664

SMP male 2 hole flange mount straight to Semi-Rigid cable



Tensolite Part No.	Interface	(Ø A)	Cable Types	Fig.
P664-1SF	Full Detent	.049 Min	.047 S/R	1
P664-2SF	Limited Detent	.049 Min	.047 S/R	1
P664-3SF	Smooth Bore	.049 Min	.047 S/R	1
P664-4SF	Full Detent	.088 Min	.085 S/R	1
P664-5SF	Limited Detent	.088 Min	.085 S/R	1
P664-6SF	Smooth Bore	.088 Min	.085 S/R	1
P664-7SF	Full Detent	.049 Min	.047 S/R LL	1
P664-8SF	Limited Detent	.049 Min	.047 S/R LL	1
P664-9SF	Smooth Bore	.049 Min	.047 S/R LL	1
P664-10SF	Full Detent	.088 Min	.085 S/R LL	1
P664-11SF	Limited Detent	.088 Min	.085 S/R LL	1
P664-12SF	Smooth Bore	.088 Min	.085 S/R LL	1
P664-13SF	Catcher's Mitt	.049 Min	.047 S/R LL	2
P664-14SF	Catcher's Mitt	.088 Min	.085 S/R LL	2

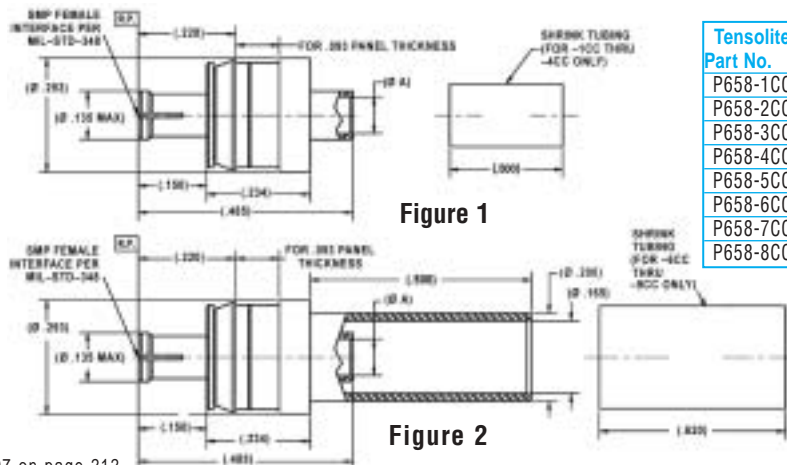
Center conductor is captivated  
Standard finish is passivated.

P664-4, 5, 6, 10, 11, 12, 14 Refer to Assembly Instruction 315 on page 229

P664-1, 2, 3, 7, 8, 9, 13, Refer to Assembly Instruction 316 on page 230

## P658

SMP female float mount straight to cable



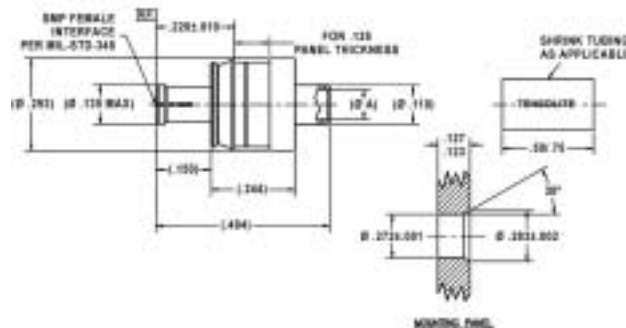
Tensolite Part No.	(Ø A)	Cable Types	Fig.
P658-1CC	.081 Min	UFF .092A	1
P658-2CC	.089 Min	RG316/U	1
P658-3CC	.090 Min	TFLEX 405HF	1
P658-4CC	.087 Min	Microflex Ø .095	1
P658-5CC	.090 Min	Ø .085 S/R	1
P658-6CC	.090 Min	Ø .085 S/R LL	2
P658-7CC	.050 Min	Ø .047 S/R	2
P658-8CC	.050Min	Ø .047 S/R LL	2

Center conductor is captivated  
Standard units are gold finish  
Axial Float: .040 inch  
Radial Float: ± .020 inch

Refer to Assembly Instruction 297 on page 212

## P666

SMP female float mount straight to cable



Tensolite Part No.	(Ø A)	Cable Types
P666-1CC	.081 Min	UFF .092A
P666-2CC	.089 Min	RG316/U
P666-3CC	.090 Min	TFLEX 405HF
P666-4CC	.087 Min	Microflex Ø .095
P666-5CC	.090 Min	Ø .085 S/R
P666-6CC	.090 Min	Ø .085 S/R LL
P666-7CC	.050 Min	Ø .047 S/R
P666-8CC	.050Min	Ø .047 S/R LL

Center conductor is captivated  
Standard units are gold finish  
Axial Float: .040 inch  
Radial Float: ± .020 inch

Refer to Assembly Instruction 364 on page 233

Tensolite

A CARLISLE Company

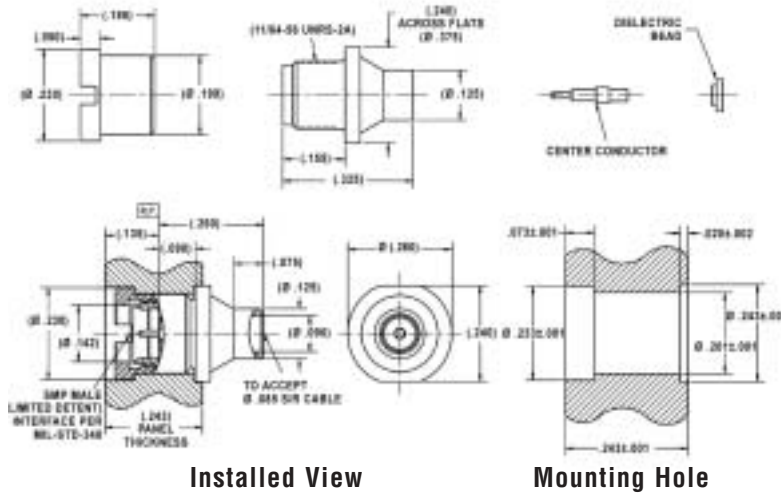
Call: 866-282-4708 Website: www.tensolite.com



# SMP Semi-Rigid Cable Connectors

## P722-1CCSF

SMP male limited detent bulkhead panel mount to Ø .085 Semi-Rigid cable

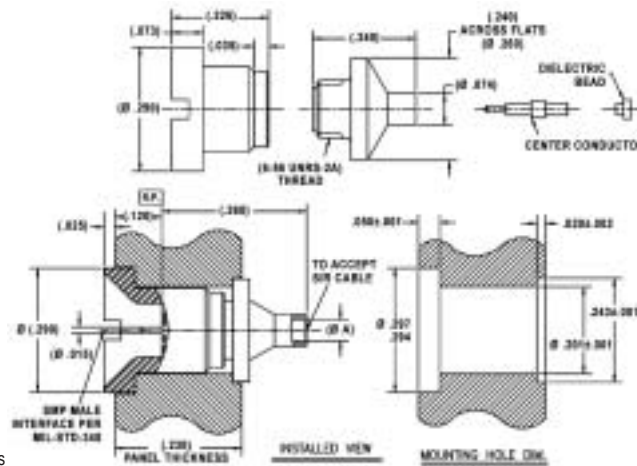


Center conductor is captivated.  
Standard finish is passivated.

Consult factory for Assembly Instructions

## P723

SMP male catcher's mitt bulkhead panel mount straight to Semi-Rigid cable



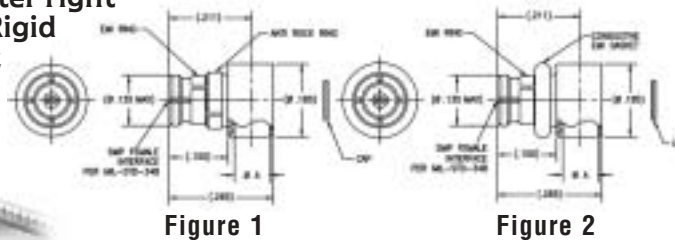
Tensolite Part No.	Cable Types	(ØA)
P723-1CC	Ø .047 Semi-Rigid	.050
P723-2CC	Ø .085 Semi-Rigid	.090

Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

## P652

SMP female miter right angle to Semi-Rigid cable (12.0 GHz version)



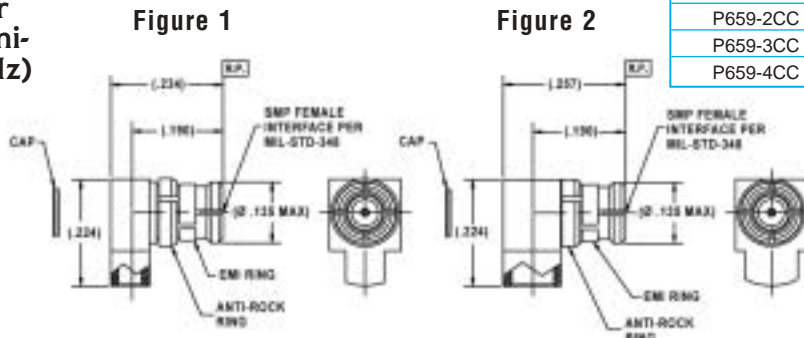
Tensolite Part No.	ØA	Ø Cable Type(s)	Fig.
P652-1CC	.049 min.	.047 Semi-Rigid cable	1
P652-2CC	.088 min.	.085 Semi-Rigid cable	1
P652-3CC	.049 min.	.047 Microporous cable	1
P652-4CC	.088 min.	.085 Microporous cable	1
P652-5CC	.049 min.	.047 Semi-Rigid cable	2
P652-6CC	.088 min.	.085 Semi-Rigid cable	2
P652-7CC	.049 min.	.047 Microporous cable	2
P652-8CC	.088 min.	.085 Microporous cable	2

Center conductor is captivated.  
Standard units are gold finish.

P652-2, 4, 6, 8, Refer to Assembly Instruction 291 on page 209  
P652-1, 3, 5, 7, Refer to Assembly Instruction 301 on page 214

## P659

SMP female miter right angle to Semi-Rigid cable (18GHz)



Tensolite Part No.	Cable Types	Fig.
P659-1CC	.047 Semi-Rigid/Semi-Flex	1
P659-2CC	.085 Semi-Rigid/Semi-Flex	2
P659-3CC	.047 Microporous	1
P659-4CC	.085 Microporous	2

Center conductor is captivated.  
Standard units are gold finish.

P659-2, 4, Refer to Assembly Instruction 307 on page 219  
P659-1, 3, Refer to Assembly Instruction 308 on page 220

SMP Semi-Rigid Cable Connectors

# SMP Right Angle Cable Connectors

## P655

SMP female miter right angle to Semi-Rigid cable (26.5 GHz version)

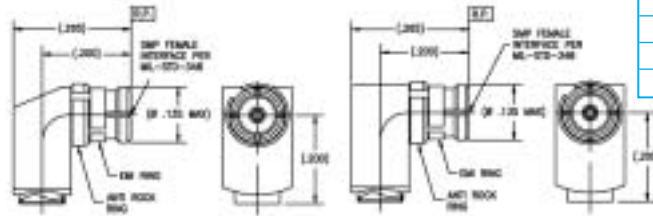


Figure 1

Figure 2

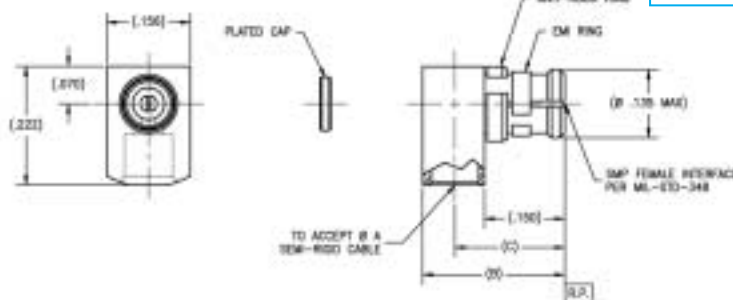
Tensolite Part No.	Cable Types	Fig.
P655-1CC	.047 Semi-Rigid/Semi-Flex	1
P655-2CC	.085 Semi-Rigid/Semi-Flex	1
P655-3CC	.047 Microporous	1
P655-4CC	.085 Microporous	1
P655-9CC	.047 Semi-Rigid/Semi-Flex	2
P655-10CC	.085 Semi-Rigid/Semi-Flex	2
P655-11CC	.047 Microporous	2
P655-12CC	.085 Microporous	2

Center conductor is captivated.  
Standard units are gold finish.

P655-2, 4, 6, 8, Refer to Assembly Instruction 311 on page 223  
P655-1, 3, 5, 7, Refer to Assembly Instruction 312 on page 224

## P604

SMP female miter right angle to Semi-Rigid cable (18.0 GHz version)



Tensolite Part No.	ØA	(B)	(C)
P604-1CC	.085	(.265)	(.205)
P604-2CC	.047	(.230)	(.190)

Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

## P665

SMP female miter right angle to Semi-Rigid cable (26.5 GHz version)

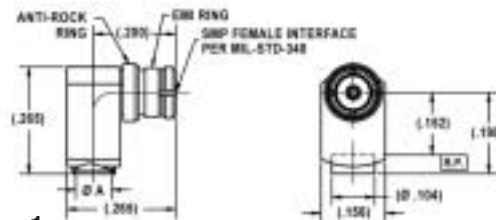


Figure 1

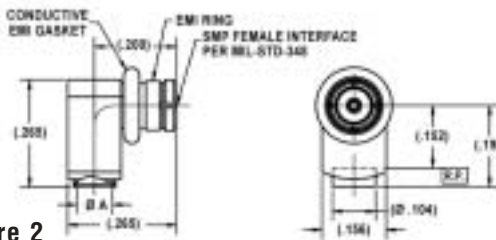


Figure 2

Tensolite Part No.	(Ø A)	Cable Types	Fig.
P665-1CC	.049 Min	.047 Semi-Rigid	1
P665-2CC	.088 Min	.085 Semi-Rigid	1
P665-3CC	.049 Min	.047 Microporous	1
P665-4CC	.088 Min	.085 Microporous	1
P665-5CC	.049 Min	.047 Semi-Rigid	2
P665-6CC	.088 Min	.085 Semi-Rigid	2
P665-7CC	.049 Min	.047 Microporous	2
P665-8CC	.088Min	.085 Microporous	2

Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

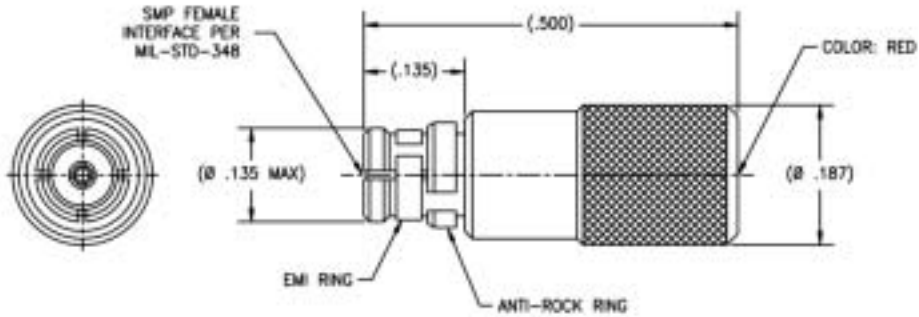


# SMP Loads & Terminations

## P930-1CC

SMP female short

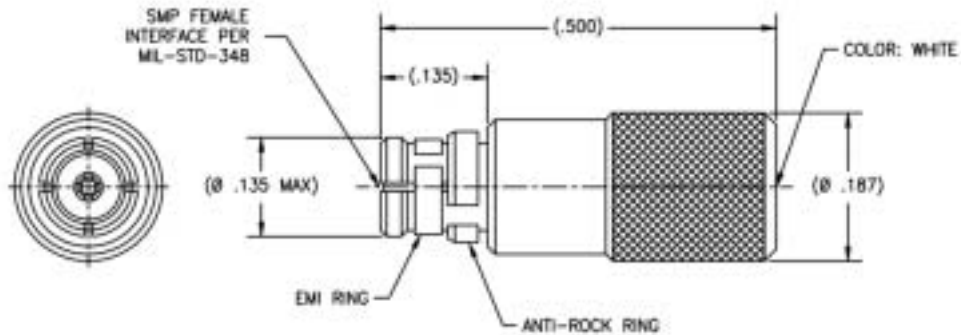
Center conductor is captivated.  
Standard units are gold finish.



## P931-1

SMP female open

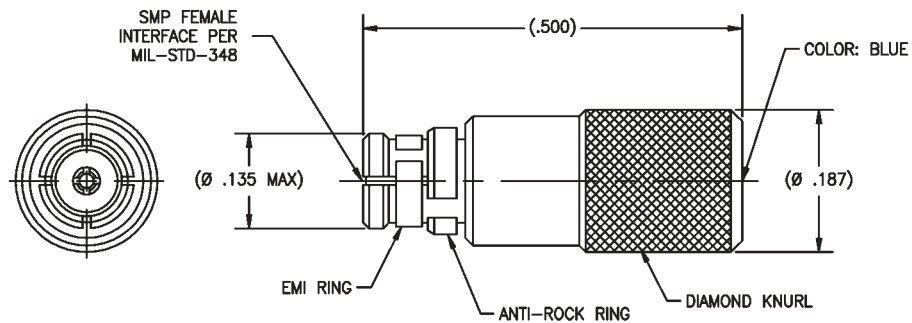
Center conductor is captivated.  
Standard units are gold finish.



## P918-1CC

SMP female straight to 50 Ohm load termination

Center conductor is captivated.  
Standard units are gold finish.

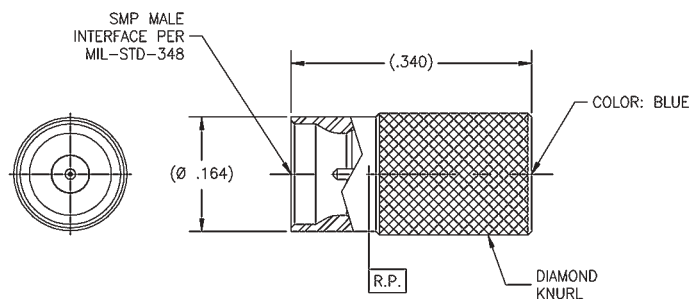


## P919

SMP male straight 50 Ohm load termination

Tensolite Part Number	Interface
P919-1CCSF	Full Detent
P919-2CCSF	Limited Detent
P919-3CCSF	Smooth Bore

Center conductor is captivated.  
Standard units are gold finish.





# SMP Panel Mount Connectors

## P674

SMP male thread in style to straight termination



Figure 1

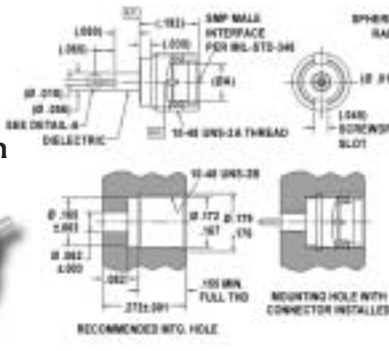
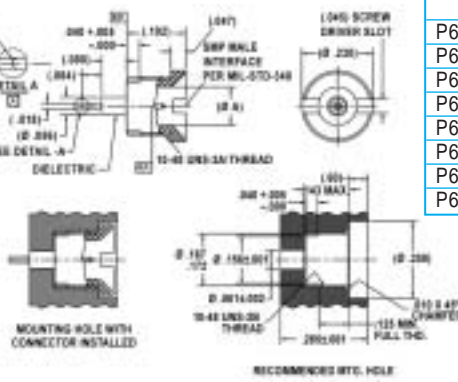


Figure 2



Tensolite Part No.	Interface(s)	(Ø A)	Fig.
P674-1CCSF	Full Detent	.116	1
P674-2CCSF	Limited Detent	.120	1
P674-3CCSF	Smooth Bore	.125	1
P674-4CCSF	Catcher's Mitt	.125	2
P674-5CCSF	Full Detent	.116	1
P674-6CCSF	Limited Detent	.120	1
P674-7CCSF	Smooth Bore	.125	1
P674-8CCSF	Catcher's Mitt	.125	2

Center conductor is captivated.  
Standard units are gold finish.

P674-1, 2, 3, 4 Refer to Assembly Instruction 359 on page 232

## P678

SMP male 2 hole flange mount straight termination



Figure 1

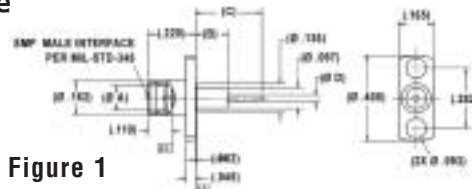


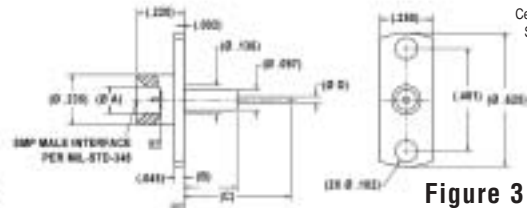
Figure 2



Tensolite Part No.	Interface(s)	(Ø A)	(B)	(C)	(Ø D)	Fig.
P678-1CCSF	Full Detent	.116	.150	.310	.030	1
P678-2CCSF	Limited Detent	.120	.150	.310	.030	1
P678-3CCSF	Smooth Bore	.125	.150	.310	.030	1
P678-4CCSF	Full Detent	.116	.115	.185	.030	1
P678-5CCSF	Smooth Bore	.125	.090	.187	.030	1
P678-6CCSF	Catcher's Mitt (Mod)	.125	NR	.200	.030	2
P678-7CCSF	Catcher's Mitt (Mod)	.125	NR	.160	.012	2
P678-8CCSF	Catcher's Mitt	.125	.250	.500	.030	3

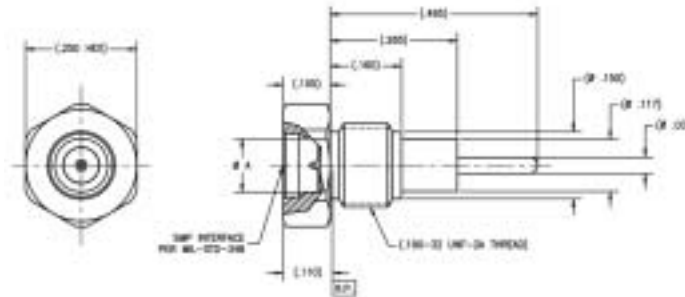
Center conductor is captivated.  
Standard finish is passivated.

Figure 3



## P834

SMP male thread-in style to Ø .036 straight termination



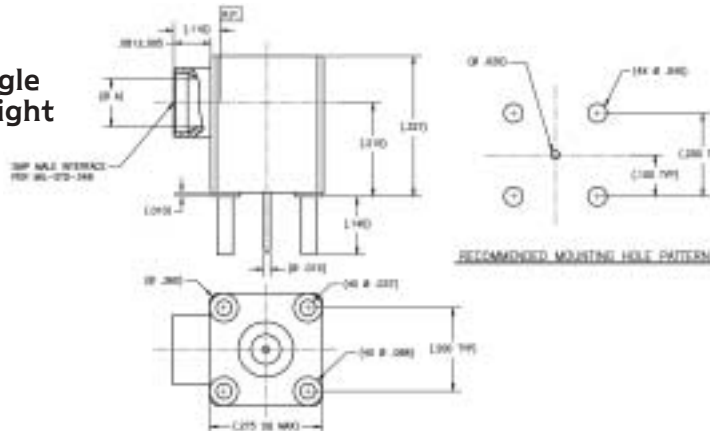
Tensolite Part No.	(ØA)	Interface
P834-1CCSF	.116	Full Detent
P834-2CCSF	.120	Limited Detent
P834-3CCSF	.125	Smooth Bore

Center conductor is captivated.  
Standard units are gold finish.  
Standard finish is passivated.

# SMP Circuit Board Connectors

## P602

SMP male right angle TCB mount to straight termination



Tensolite Part No.	Interface	(ØA)
P602-1CC	Smooth Bore	.125
P602-2CC	Limited Detent	.120
P602-3CC	Full Detent	.116

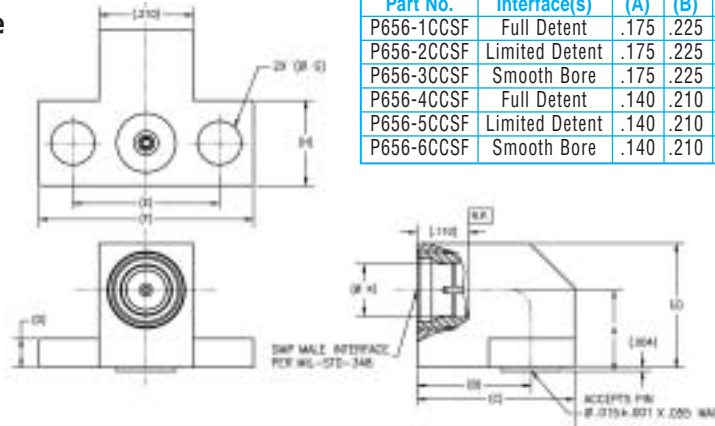
Center conductor is captivated.  
Standard units are gold finish.



# SMP Circuit Board Connectors

## P656

SMP male to female  
right angle 2 hole  
flange mount

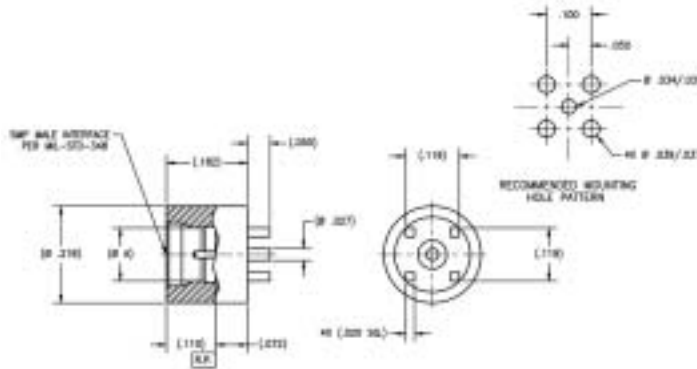


Tensolite Part No.	Interface(s)	(A)	(B)	(C)	(D)	(E)	(F)	(ØG)	(H)	(J)	(ØK)
P656-1CCSF	Full Detent	.175	.225	.352	.065	.328	.480	.098	.192	.280	.116
P656-2CCSF	Limited Detent	.175	.225	.352	.065	.328	.480	.098	.192	.280	.120
P656-3CCSF	Smooth Bore	.175	.225	.352	.065	.328	.480	.098	.192	.280	.125
P656-4CCSF	Full Detent	.140	.210	.295	.045	.282	.400	.076	.170	.240	.116
P656-5CCSF	Limited Detent	.140	.210	.295	.045	.282	.400	.076	.170	.240	.120
P656-6CCSF	Smooth Bore	.140	.210	.295	.045	.282	.400	.076	.170	.240	.125

Center conductor is captivated.  
Standard finish is passivated.

## P695

SMP male straight to  
PCB mount

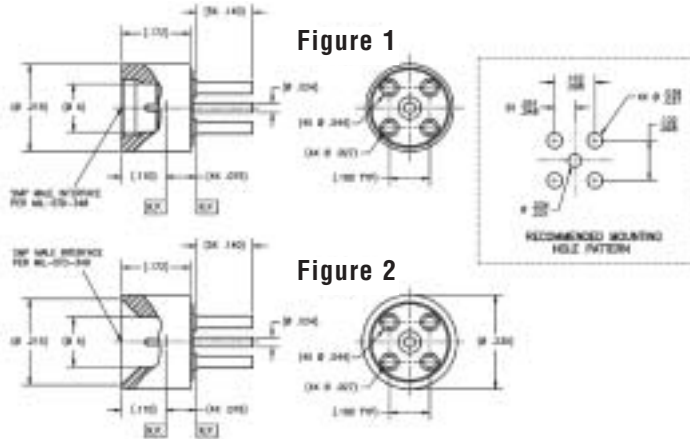


Tensolite Part No.	(ØA)	Interface
P695-1CCSF	.120	Limited Detent
P695-2CCSF	.116	Full Detent
P695-3CCSF	.125	Smooth Bore

Center conductor is captivated.  
Standard finish is passivated.

## P696

SMP male  
straight to PCB  
mount

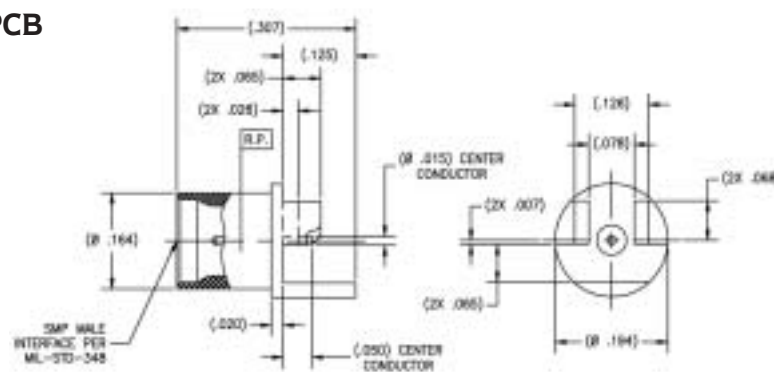


Tensolite Part No.	Interface(s)	(Ø A)	Fig.
P696-1CCSF	Full Detent	.116	1
P696-2CCSF	Limited Detent	.120	1
P696-3CCSF	Smooth Bore	.125	2
P696-4CCSF	Catcher's Mitt	.125	2

Center conductor is captivated.  
Standard finish is passivated.

## P698

SMP male straight PCB  
edge mount



Tensolite Part Number	Interface
P698-1CC	Full Detent
P698-2CC	Limited Detent
P698-3CC	Smooth Bore

Center conductor is captivated.  
Standard units are gold finish.

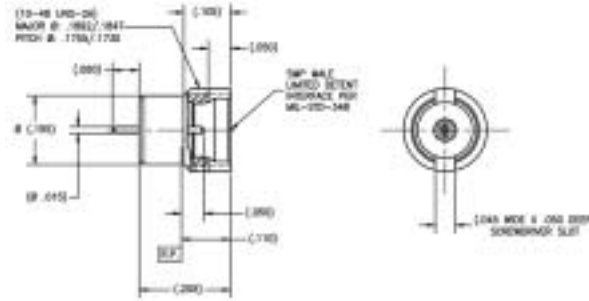






## P761-1CC

SMP male limited detent thread-in style to straight termination (Hermetic)

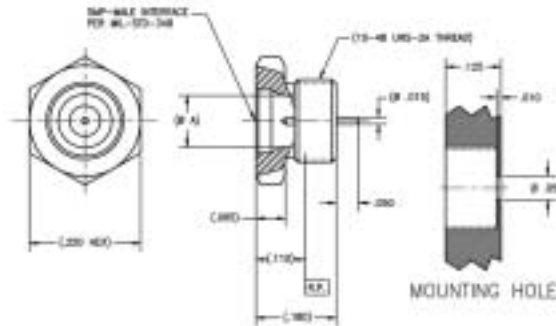


Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

## P683

SMP male thread-in style to straight termination (Hermetic)

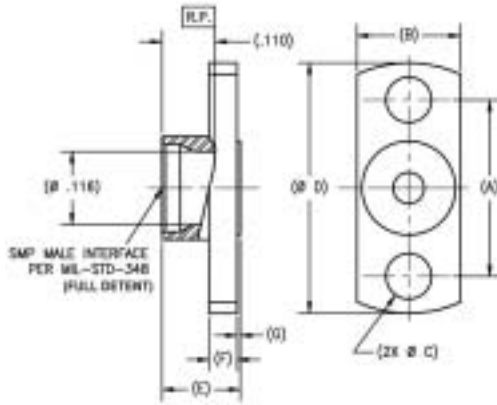


Tensolite Part No.	(ØA)	Interface (s)
P683-1CC	.116	Full Detent
P683-2CC	.120	Limited Detent
P683-3CC	.125	Smooth Bore

Center conductor is captivated.  
Standard units are gold finish.

## P670

SMP full detent straight 2 hole flange mount shroud



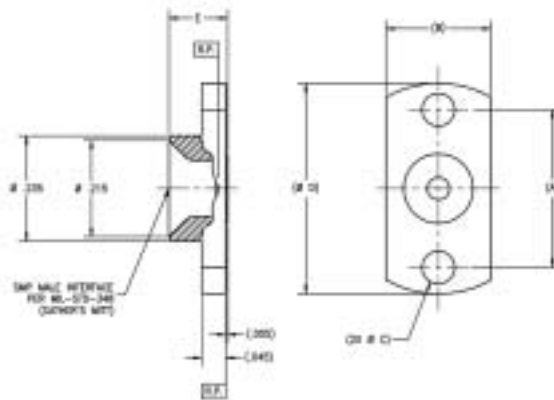
Tensolite Part No.	(A)	(B)	(Ø C)	(Ø D)	(E)	(F)	(G)
P670-1SF	.328	.187	.098	.480	.120	.045	.004
P670-2SF	.481	.223	.102	.625	.120	.045	.002
P670-3SF	.282	.165	.073	.400	.120	.045	.002
P670-4SF	.400	.186	.103	.550	.120	.045	.004
P670-5SF	.228	.165	.073	.400	.120	.045	.005
P670-6SF	.282	.165	*	.400	.120	.045	.005
P670-7SF	NR	NR	NR	.625	.120	.045	.002
P670-8SF	.481	.223	.102	.625	.120	.045	.004
P670-9SF	.282	.165	.073	.400	.120	.045	.004
P670-10SF	.382	.187	.098	.480	.120	.045	.005

\* 2X #0-80 UNF-2B X Ø .085 X 90° countersink  
Standard finish is passivated.

Refer to Assembly Instruction 305 on page 217

## P671

SMP shroud, catcher's mitt 2 hole flange mount



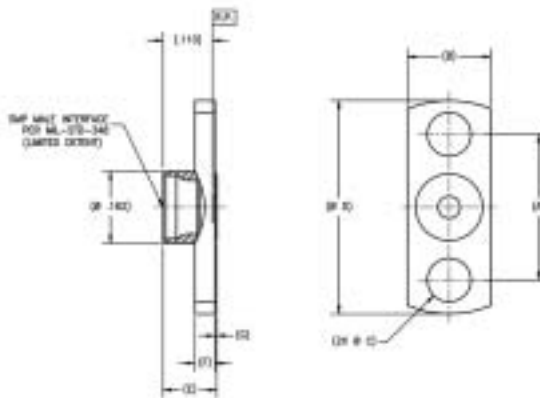
Tensolite Part No.	(A)	(B)	(Ø C)	(Ø D)	(E)
P671-1SF	.352	.235	.073	.470	.120
P671-2SF	.481	.235	.102	.625	.120
P671-3SF	.400	.235	.073	.550	.120

Standard finish is passivated.

Refer to Assembly Instruction 305 on page 217

## P672

SMP limited detent straight 2 hole flange mount shroud



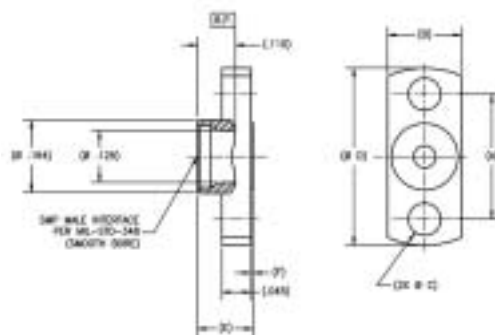
Tensolite Part No.	(A)	(B)	(Ø C)	(Ø D)	(E)	(F)	(G)
P672-1SF	.328	.187	.098	.480	.120	.045	.004
P672-2SF	.481	.223	.102	.625	.120	.045	.004
P672-3SF	.282	.165	.073	.400	.120	.045	.002
P672-4SF	.400	.187	.103	.550	.120	.045	.004

Standard finish is passivated.

Refer to Assembly Instruction 305 on page 217

## P673

SMP shroud smooth bore straight 2 hole flange mount



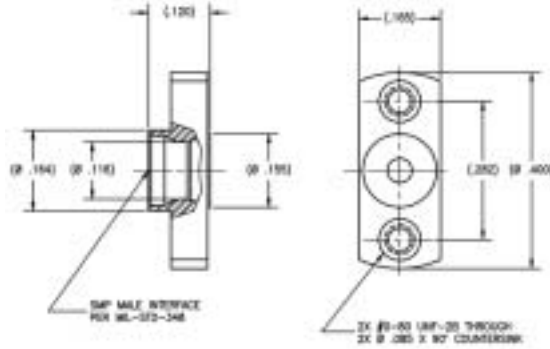
Tensolite Part No.	(A)	(B)	(Ø C)	(Ø D)	(E)	(F)
P673-1SF	.328	.187	.098	.480	.120	.004
P673-2SF	.481	.223	.102	.625	.120	.002
P673-3SF	.282	.165	.073	.400	.120	.002

Standard finish is passivated.

Refer to Assembly Instruction 305 on page 217

## P739-ISF

SMP full detent shroud



Standard finish is passivated.

Consult factory for Assembly Instructions

## P676

SMP shroud, thread in style

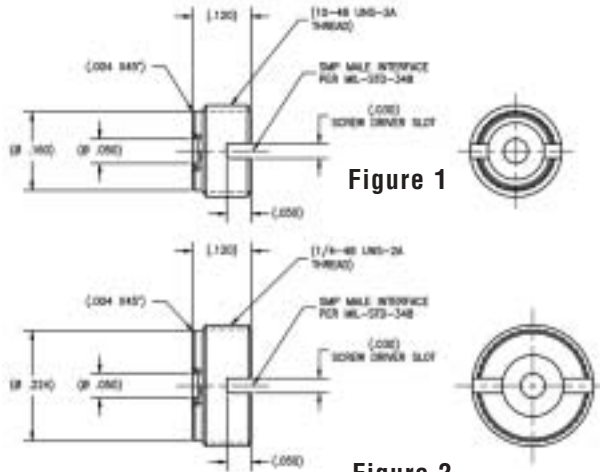


Figure 1

Figure 2

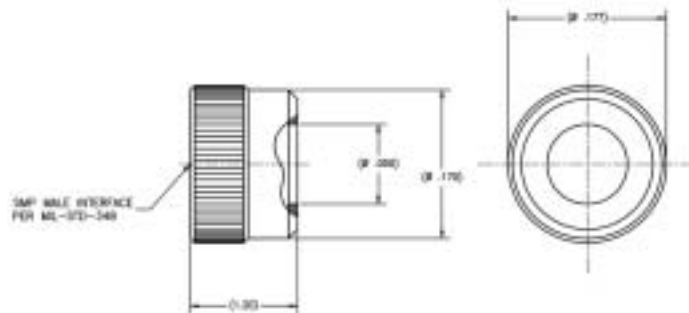
Tensolite Part Number	Interface	Fig.
P676-1SF	Full Detent	1
P676-2SF	Limited Detent	1
P676-3SF	Smooth Bore	1
P676-4SF	Catcher's Mitt	2

Standard finish is passivated.

Refer to Assembly Instruction 306 on page 218

## P675

SMP press in shroud



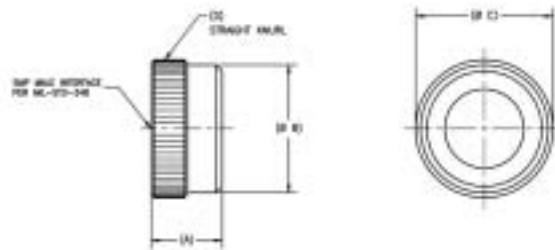
Tensolite Part Number	Interface
P675-1SF	Full Detent
P675-2SF	Limited Detent
P675-3SF	Smooth Bore

Standard finish is passivated.

Consult factory for Assembly Instructions

## P769

SMP full detent press-in shroud



Tensolite Part No.	(A)	(ØB)	(ØC)	(D)
P769-1SF	.080	.143	.154	50P
P769-2SF	.120	.163	.174	50P
P769-3SF	.115	.163	.184	128P

Standard finish is passivated.

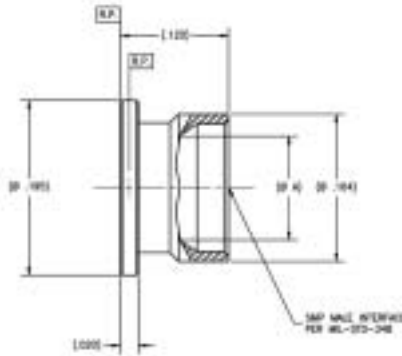
Consult factory for Assembly Instructions



# SMP Surface Mount Connectors

## P677

SMP shroud solder-in surface mount



Tensolite Part Number	Interface	(ØA)
P677-1	Full Detent	.116
P677-2	Limited Detent	.120
P677-3	Smooth Bore	.125

Standard units are gold finish.

## P702

SMP male straight surface mount

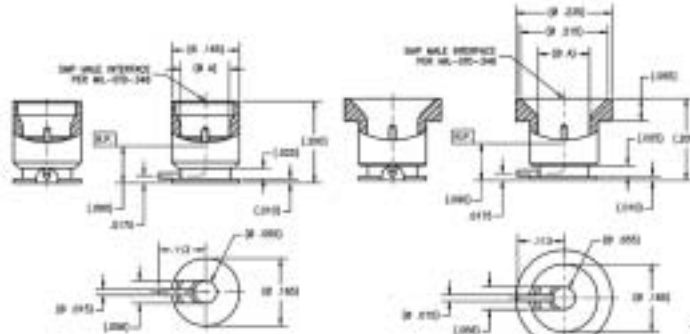
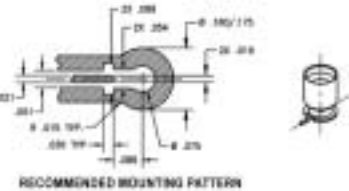


Figure 1

Figure 2

Tensolite Part Number	Interface	Fig.	(ØA)
P702-1CC	Full Detent	1	.116
P702-2CC	Limited Detent	1	.120
P702-3CC	Smooth Bore	1	.125
P702-4CC	Catcher's Mitt	2	.125

Center conductor is captivated. Standard units are gold finish.



## P703

SMP male straight PCB surface mount

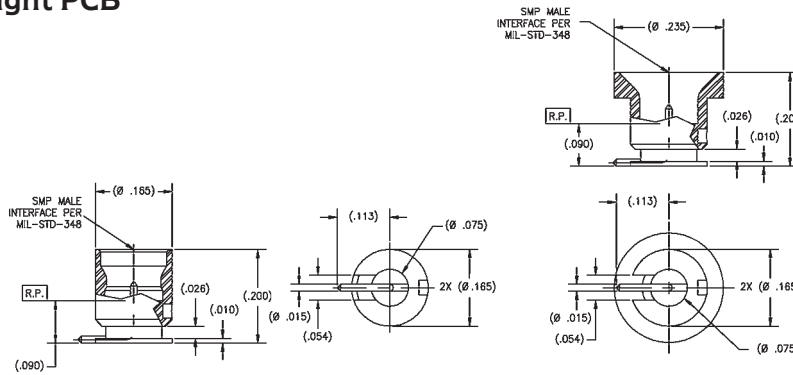


Figure 1

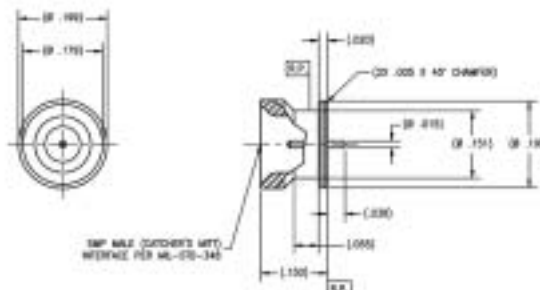
Figure 2

Tensolite Part Number	Interface	Figure
P703-1CC	Full Detent	1
P703-2CC	Limited Detent	1
P703-3CC	Smooth Bore	1
P703-4CC	Catcher's Mitt	2

Center conductor is captivated. Standard units are gold finish.

## P757-1CC

SMP male catcher's mitt surface mount to straight termination



Center conductor is captivated. Standard units are gold finish.

SMP Surface Mount Connectors





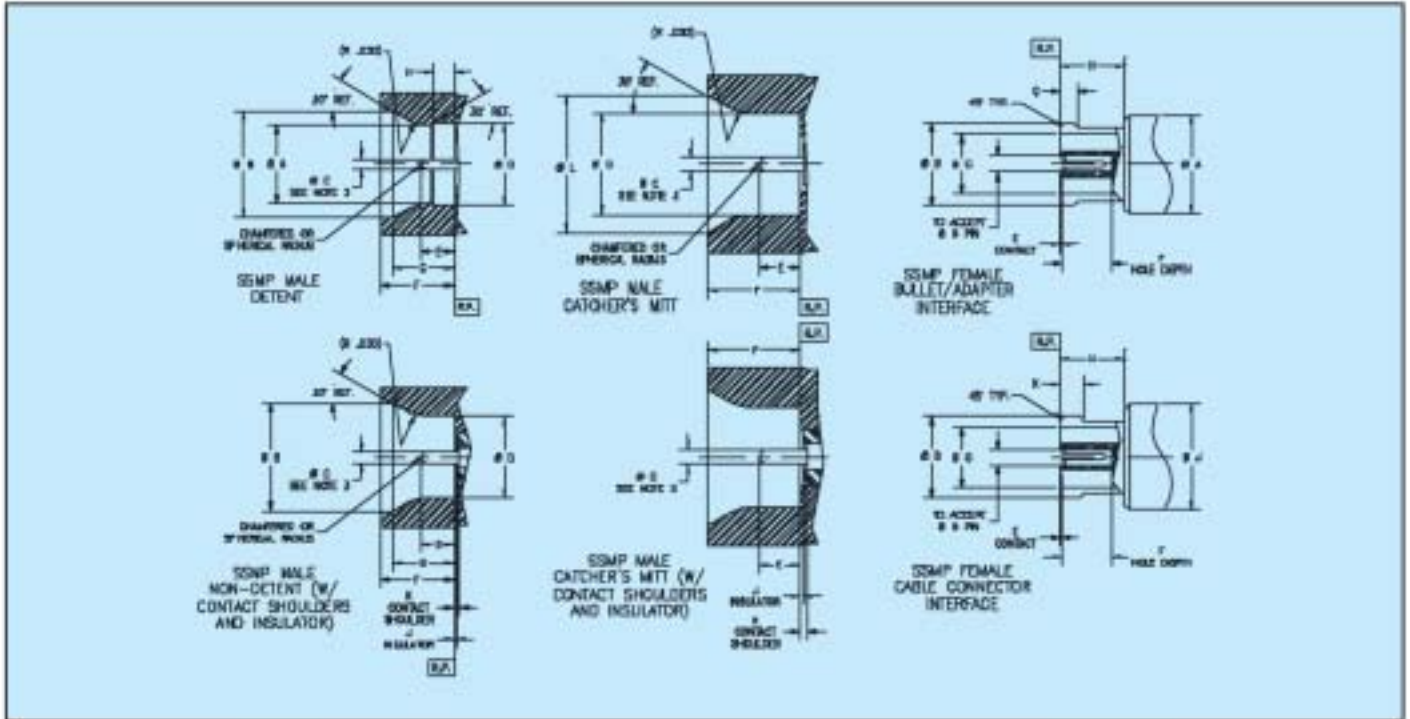
# SSMP Series

SSMP Series





# SSMP Interface Mating Dimensions (Per MIL-STD-348)



## MALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
∅ A	----	----	.085	2.16
∅ B	.113	2.87	----	----
∅ C <sup>3</sup>	.011	0.28	.013	0.33
∅ D	.086	2.18	----	----
E	.030	0.76	.045	1.14
F	----	----	.084	2.13
G	----	----	.069	1.75
H	.021	0.53	----	----
J <sup>4</sup>	.000	0.00	-.006	-0.15
K <sup>5</sup>	.000	0.00	-.006	-0.15
∅ L	.130	3.30	----	----

## FEMALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
∅ A	----	----	.109	2.77
∅ B	----	----	.095	2.41
∅ C	.063	1.60	----	----
∅ D	.011	0.28	.013	0.33
E <sup>6</sup>	.000	0.00	-.006	-0.15
F	.050	1.27	----	----
G	----	----	.021	0.53
H	.068	1.73	----	----
∅ J	----	----	.112	2.84
K	----	----	.028	0.71

**Note(s):**

1. Dimensions are in inches
2. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
3. Pin is not supplied with shroud.
4. Dielectric insulator gap is measured from connector body reference plane .000 in. max. above (flush) to .006 in. max. below.
5. Contact gap is measured from connector body reference plane .000 in. max. above (flush) to .006 in. max. below.

# SSMP Specifications

The specifications below are general specifications for all SSMP™ connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is

available from the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

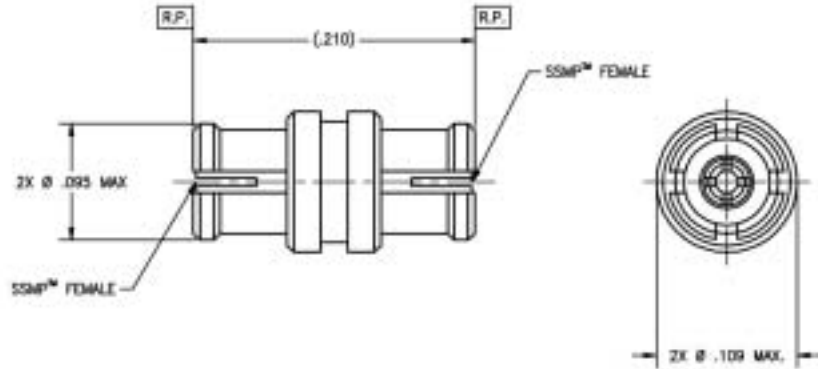
Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5667, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per ZZ-R-765, CLASS IIB, 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C or D over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	9 lbs. max engage, 4 lbs. min. withdrawal
Misalignment	+/- .012 Radial, .000/.007 Axial
Cable Retention Force	Consult factory.
Mating Characteristics	Female only: 1/4 oz. min. withdrawal with .0110 - .0000/+ .0002 diameter pin.
Connector Durability	100 min. insertion and withdrawal with detent male. 5000 min. insertion and withdrawal with non-detent male.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B. No measurement at high humidity.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megohms min. within 5 minutes after removal from humidity.

Complete specifications on every connector in this catalog are available from the factory.

# SSMP In-Series Adapters

## PI01-ICC

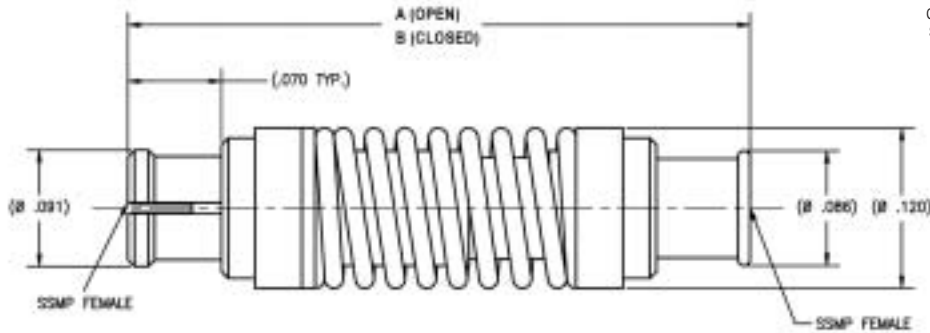
SSMP female straight to female adapter



Center conductor is captivated.  
Standard units are gold finish.

## PI38-ICC

SSMP female spring loaded straight to female adapter



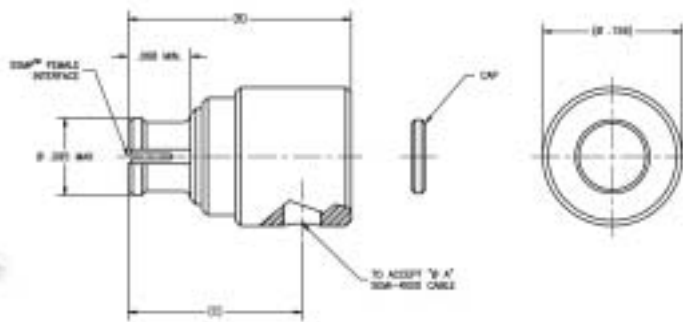
Tensolite Part No.	(A)	(B)
P138-1CC	.515	.465

Center conductor is captivated.  
Standard units are gold finish.

# SSMP Semi-Rigid Cable Connectors

## PI05

SSMP female right angle to Semi-Rigid cable



Tensolite Part No.	Ø A	(B)	(C)
P105-1CC	.047	.250	195
P105-2CC	.085	.250	195
P105-3CC	.047 L/L	.178	126

Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

## PI07

SSMP female straight to Semi-Rigid cable

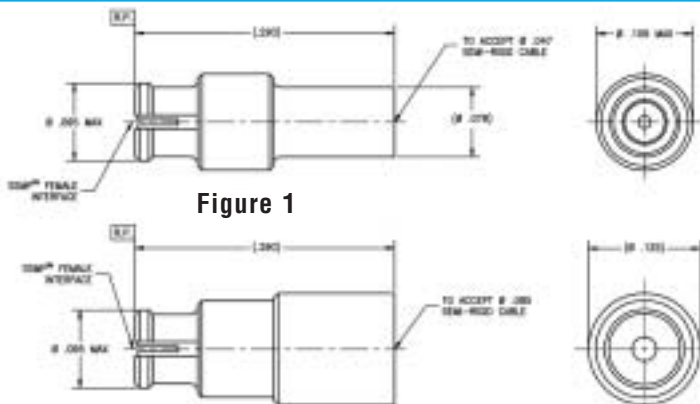


Figure 1

Figure 2

Tensolite Part No.	Applicable Figure
P107-1CC	1
P107-2CC	2

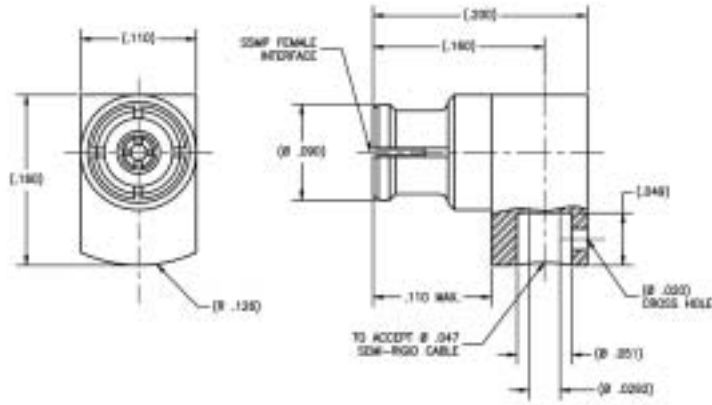
Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

# SSMP Semi-Rigid Cable Connectors

## P148-1CC

SSMP female  
right angle to  
Ø .047 S/R cable

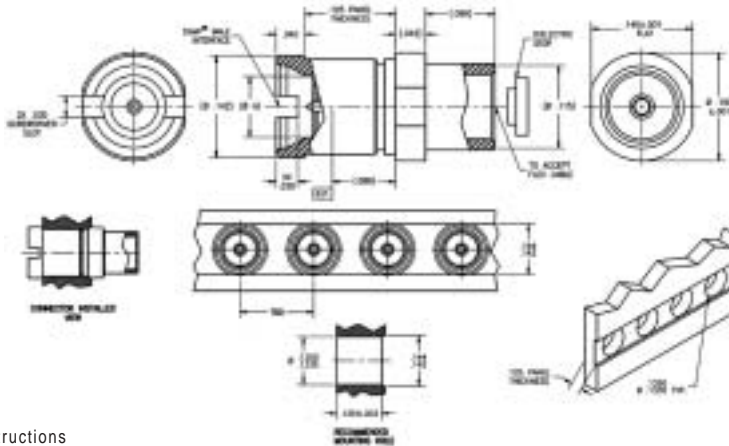


Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

## P156

SSMP male  
bulkhead mount  
straight to  
LLF-1087 flex  
cable



Tensolite Part Number	Interface	(Ø A)
P156-1CCSF	Detent	(.085)
P156-2CCSF	Non-Detent	(.088)

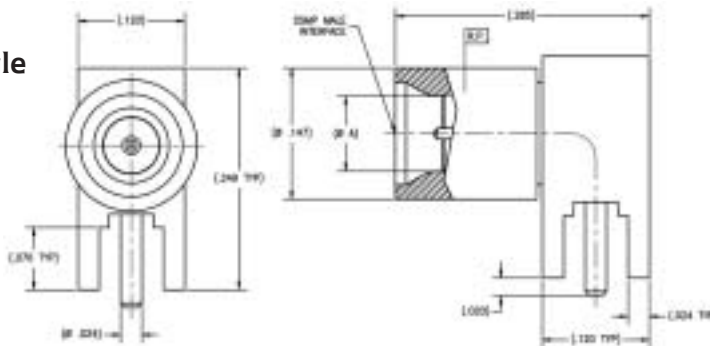
Center conductor is captivated.  
Standard finish is passivated.

Consult factory for Assembly Instructions

# SSMP Circuit Board Connectors

## P303

SSMP male right angle  
to PCB mount

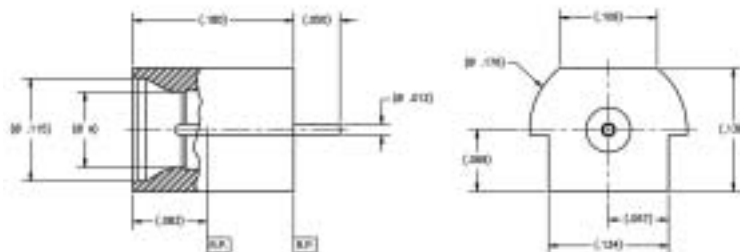


Tensolite Part Number	Interface	(Ø A)
P303-1CC	Detent	(.085)
P303-2CC	Smooth Bore	(.088)

Center conductor is captivated.  
Standard units are gold finish.

## P319

SSMP male PCB edge  
mount to straight  
termination



Tensolite Part No.	(Ø A)	Interface
P319-1CC	(.088)	Detent
P319-2CC	(.085)	Smooth bore

Center conductor is captivated.  
Standard units are gold finish.

SSMP Semi-Rigid Cable Connectors,  
Circuit Board Connectors



## P122

SSMP male to straight termination (hermetic seal)

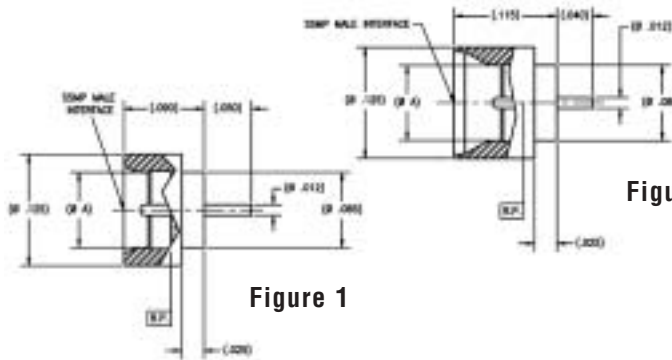


Figure 2

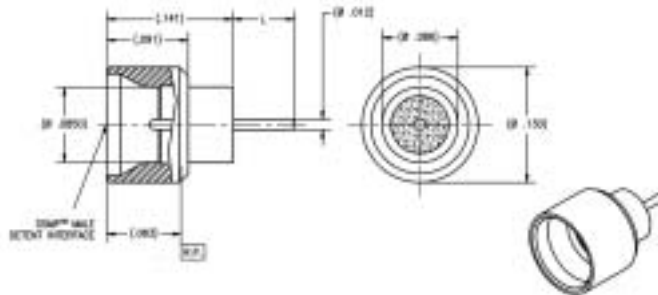
Tensolite Part No.	Interface	Ø A	Fig.
P122-1CC	Detent	.085	1
P122-2CC	Smooth Bore	.088	1
P122-3CC	Detent	.085	2
P122-4CC	Smooth Bore	.088	2

Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

## P154

SSMP male detent straight solder in hermetic



Tensolite Part No.	(L)
P154-1CC	(.030)
P154-7CC	(.060)
P154-13CC	(.090)
P154-17CC	(.110)
P154-21CC	(.130)

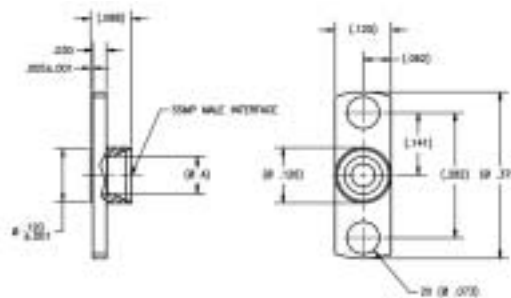
Center conductor is captivated.  
Standard units are gold finish.  
Other pin lengths (L) available, contact factory.

Consult factory for Assembly Instructions

# SSMP Shrouds

## P203

SSMP male 2 hole flange mount shroud



Tensolite Part Number	Interface	(Ø A)
P203-1SF	Full Detent	.085
P203-2SF	Smooth Bore	.088

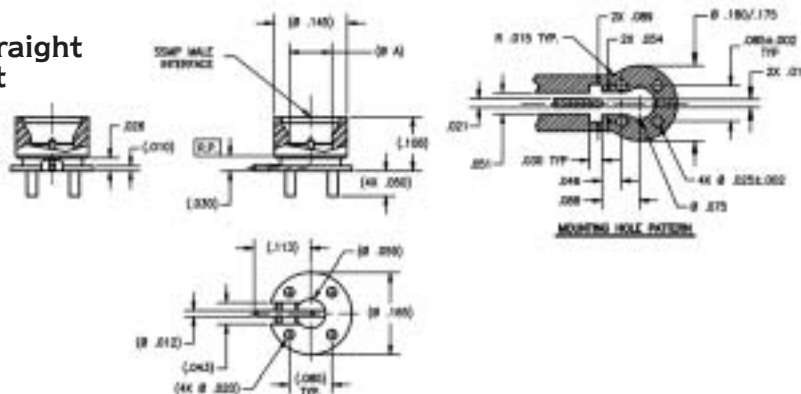
Standard finish is passivated.

Consult factory for Assembly Instructions

# SSMP Surface Mount Connectors

## P308

SSMP male straight surface mount



Tensolite Part Number	Interface	(Ø A)
P308-1CC	Detent	.085
P308-2CC	Non-Detent	.088

Center conductor is captivated.  
Standard units are gold finish.



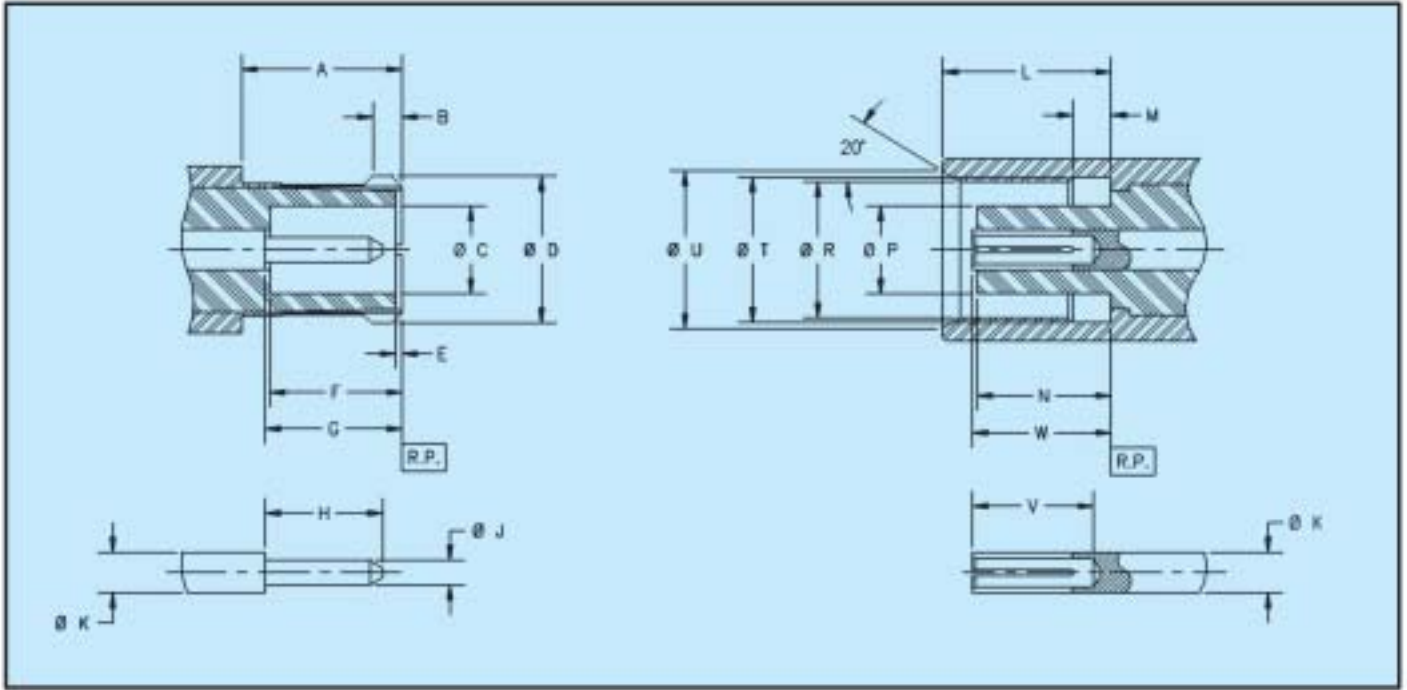


# MCX Series



MCX Series





### MALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
A	.163	4.15	----	----
B	.028	0.70	.030	0.75
Ø C	.079	2.00	.081	2.07
Ø D <sup>2</sup>	.146	3.72	.150	3.80
E	----	----	.012	0.30
F	.110	2.80	.126	3.20
G	.110	2.80	.126	3.20
H	.098	2.49	.102	2.59
Ø J	.019	0.48	.021	0.53
Ø K	.037 in. nom.		0.95 mm nom.	

### FEMALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
Ø K	.037 in. nom.		0.95 mm nom.	
L	.157	4.00	.162	4.12
M	.030	0.75	.033	0.85
N	.102	2.60	.110	2.80
Ø P	.071	1.80	.078	1.98
Ø R	.135	3.42	.137	3.48
Ø T	.142	3.60	.146	3.70
Ø U	.148	3.75	.152	3.85
V	.110	2.80	----	----
W	.091	2.30	.110	2.80

**Note(s):**

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
3. Dimension prior to slotting.

The specifications below are general specifications for all MCX connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from

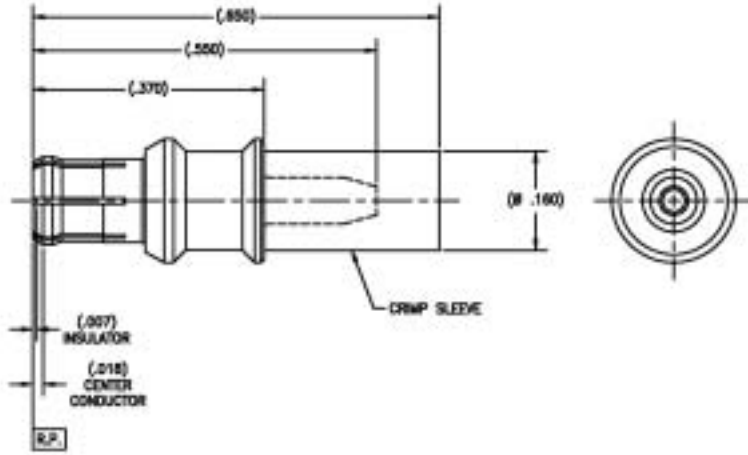
the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

Requirement	Specifications
<b>General</b>	
Material	Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Impedance	50 Ohms Nominal
Insulation Resistance	The insulation resistance shall not be less than 10,000 megaohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	Engage: 5.6 lbs. Max Disengage: 4.5 lbs. Max.
Center Contact Captivation	Consult factory
Cable Retention Force	Refer to applicable military slash sheet or consult factory.
Connector Durability	500 cycles. The connector shall meet the mating characteristic requirements.
<b>Environmental</b>	
Temperature Range	- 65°C to + 165°C
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Thermal Shock	Specification MIL-STD-202, Method 107, Test Condition C.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B.
Moisture Resistance	Specification MIL-STD-202, Method 106, No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

Complete specifications on every connector in this catalog are available from the factory.

## 3-M690-816-10

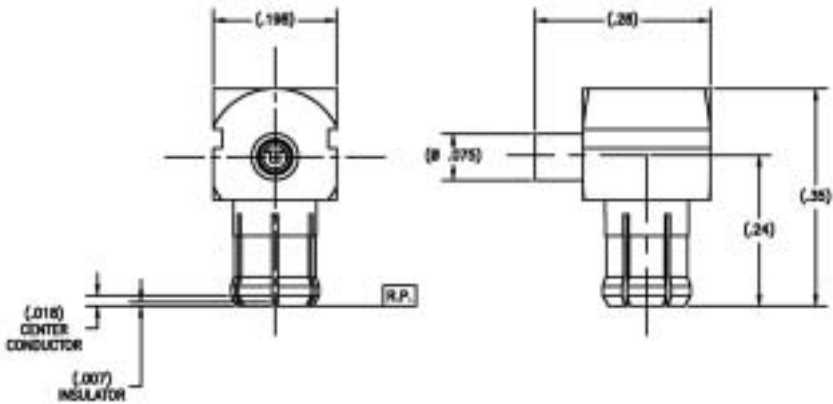
MCX straight plug, M17/93 -  
RG 178, crimp - solder



Consult factory for Assembly Instructions

## 3-M797-890-10

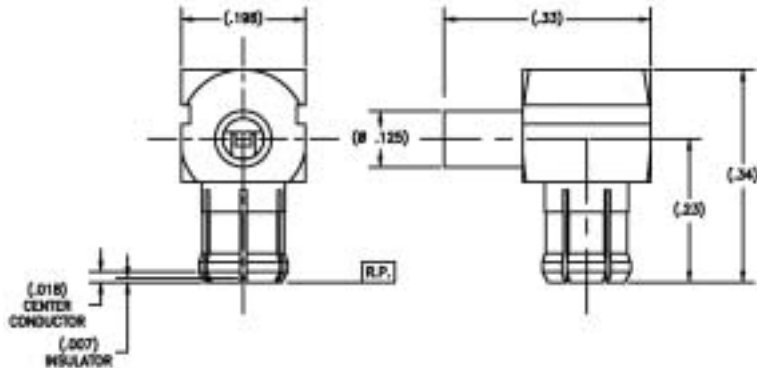
MCX right angle, .047 Semi-  
Rigid, solder - solder



Consult factory for Assembly Instructions

## 3-M797-790-10

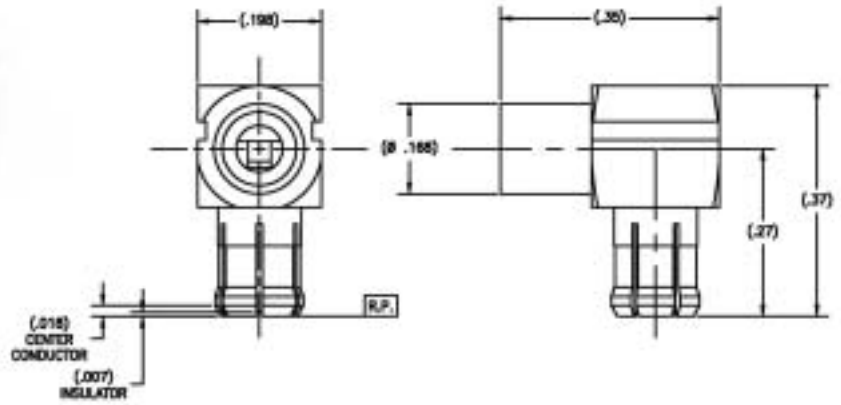
MCX right angle, .086  
Semi-Rigid, solder - solder



Consult factory for Assembly Instructions

## 3-M797-617-10

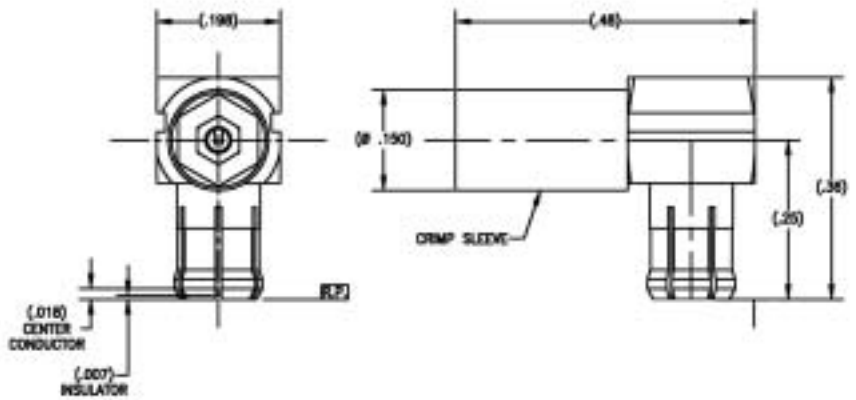
MCX right angle, .141  
Semi-Rigid, solder - solder



Consult factory for Assembly Instructions

## 3-M790-816-10

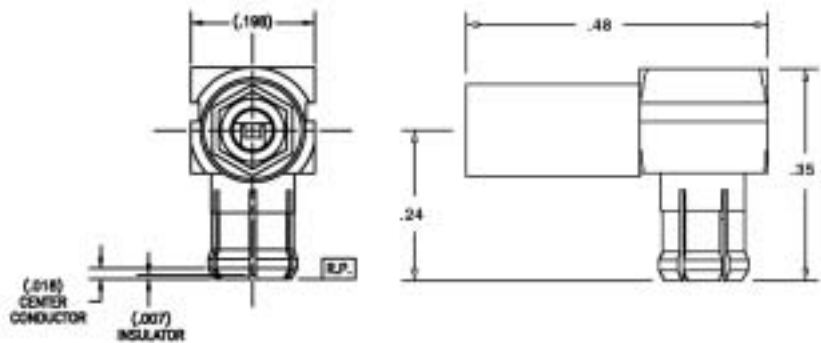
MCX right angle, M17/93  
RG 178, crimp - solder



Consult factory for Assembly Instructions

## 3-M790-317-10

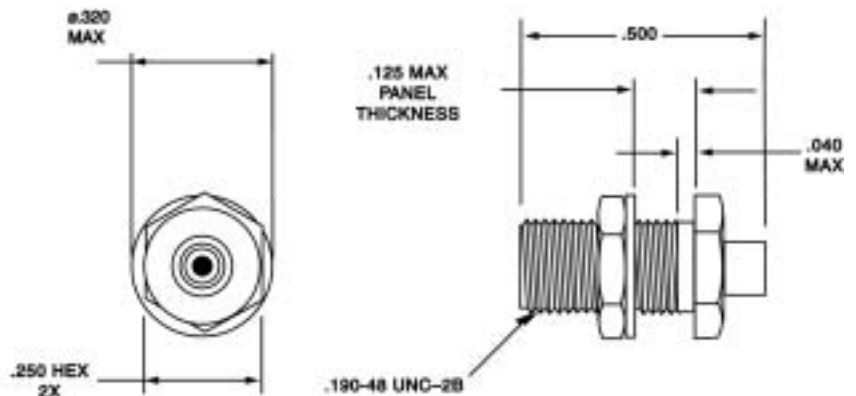
MCX right angle, RG 174,  
188, 316, crimp - crimp



Consult factory for Assembly Instructions

## 3-M097-716-11

MCX female bulkhead, .086  
Semi-Rigid, solder - solder



Consult factory for Assembly Instructions



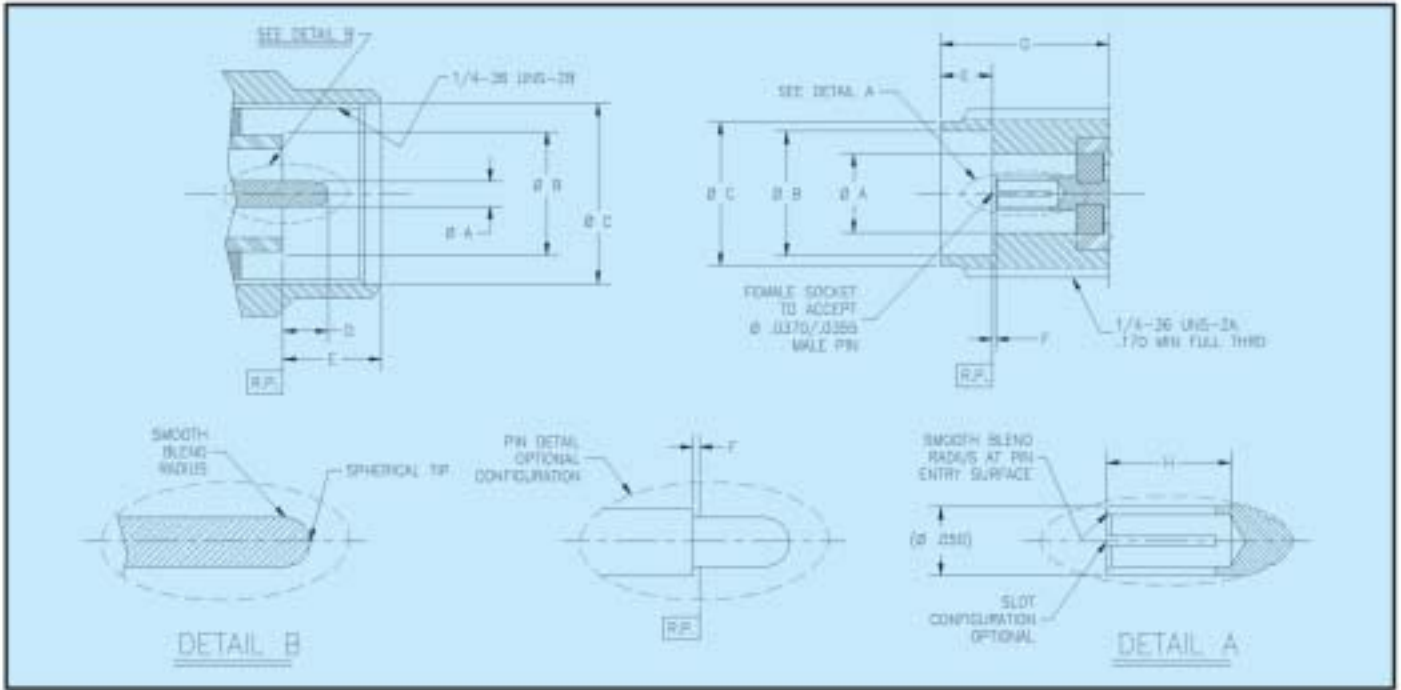


# SMK 2.92mm Series



SMK 2.92mm Series

# SMK 2.92mm Interface Mating Dimensions (Per MIL-STD-348)



## MALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
Ø A	.0355	0.90	.037	0.94
Ø B	.1178	4.52	.180	4.57
Ø C	.255	6.48	.000	0.00
Ø D	.055	1.40	.065	1.65
E	----	----	.135	3.43
F <sup>3</sup>	0.00	0.00	.005	0.13

## FEMALE

LTR	Minimum		Maximum	
	in	mm <sup>2</sup>	in	mm <sup>2</sup>
Ø A	.114	2.90	.116	2.95
Ø B	.181	4.60	.183	4.65
Ø C	.206	5.23	.214	5.44
Ø D	.0355	0.90	.037	0.94
E	.074	1.88	.078	1.98
F <sup>3</sup>	.000	0.00	.005	.013
G	.218	5.54	----	----
H	.105	2.67	----	----

### Note(s):

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
3. Contact gap is measured from connector body reference plane .000 in. max. above (flush) to .005 in. max. below.

# SMK 2.92mm Specifications

The specifications below are general specifications for all SMK connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is available from

the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370, AMS 5511 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PPO™ (Polyphenolic Oxide) Silicone Rubber per ZZ-R-765, CLASS IIB, 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Frequency	DC – 40GHz
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 2 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	60 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	15 in.-lbs. minimum. Applicable to male connectors only.
Cable Retention Force	Refer to applicable military slash sheet or consult factory.
Mating Characteristics	See interface dimensions shown. Applicable to females only; oversize pin .0375 +.0001/-.0000 diameter .030/.045 deep; Insertion force 2 lbs. maximum with .0370 +.0001/-.0000 diameter pin; withdrawal force 1 oz. minimum with .0355 maximum diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Recommended Mating Torque	8-10 inch-pounds.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

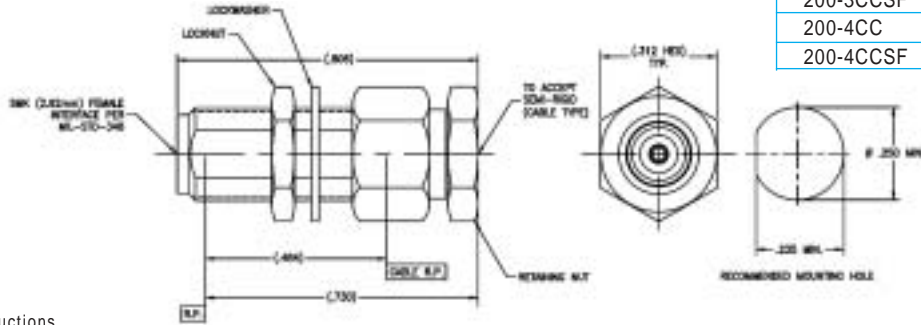
Complete specifications on every connector in this catalog are available from the factory.



# SMK 2.92mm Cable Connectors Semi-Rigid/Semi-Flex

## 200-ICC

SMK 2.92mm female bulkhead straight to Semi-Rigid cable

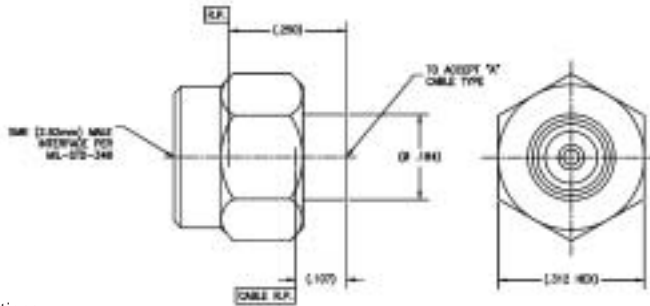


Tensolite Part No.	Cable type
200-1CC	.141
200-1CCSF	.141
200-2CC	.085
200-2CCSF	.085
200-3CCSF	.141
200-4CC	.118
200-4CCSF	.118

Consult factory for Assembly Instructions

## 201-ICC

SMK (2.92mm) male straight to semi-retractable coupling nut



Tensolite Part No.	Cable type
201-1CC	.141 Semi-rigid cable
201-1CCSF	.141 Semi-rigid cable
201-2CC	.085 Semi-Rigid
201-2CCSF	.085 Semi-Rigid
201-3CC	.141 Low loss cable
201-3CCSF	.141 Low loss cable
201-4CC	.116 Low loss cable
201-4CCSF	.116 Low loss cable

Center conductor is captivated. Standard finish is passivated.

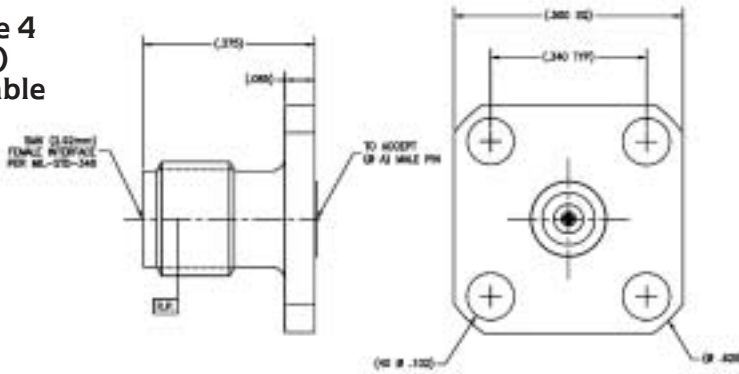
Consult factory for Assembly Instructions

SMK 2.92mm Cable Connectors, Semi-Rigid/Semi-Flex

# SMK 2.92mm Field Replaceable Connectors

## 230CC

SMK 2.92mm female 4 hole flange (.500 SQ) mount field replaceable

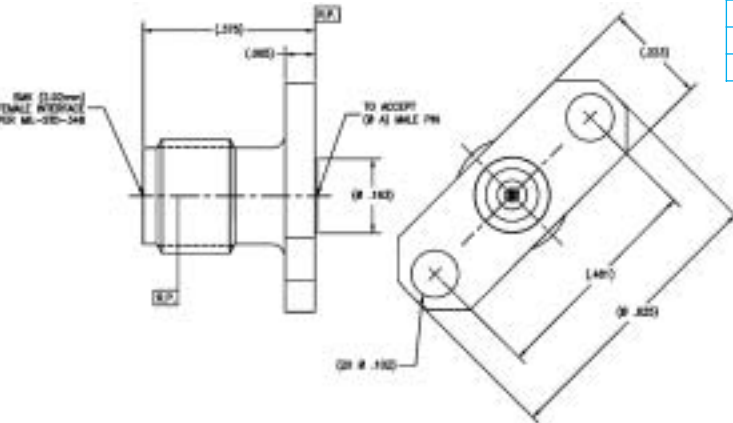


Tensolite Part No.	( $\phi$ A)
230CC	.0120
230CCSF	.0120

Center conductor is captivated.  
Standard finish is passivated.

## 231CC

SMK 2.92mm female 2 hole flange (.223 X .625) mount straight field replaceable

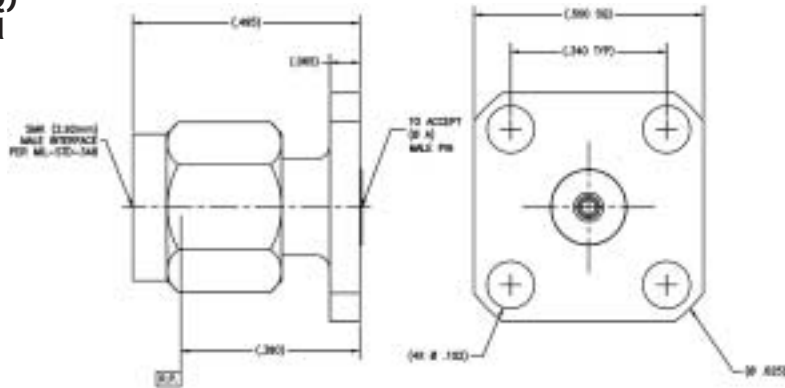


Tensolite Part No.	( $\phi$ A)
231CC	.0120
231CCSF	.0120

Center conductor is captivated.  
Standard finish is passivated.

## 229CC

SMK 2.92mm male 4 hole flange (.500 SQ) mount straight field replaceable



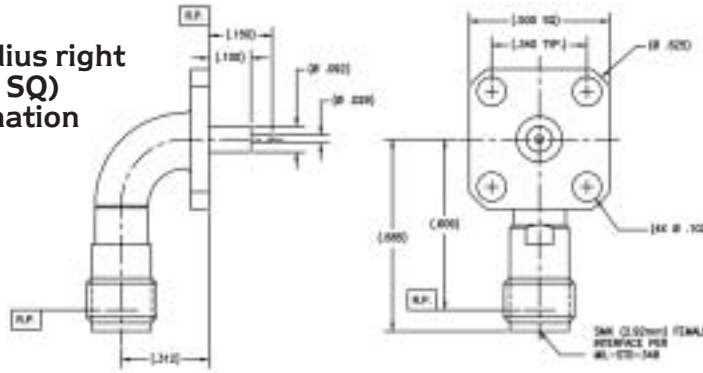
Tensolite Part No.	( $\phi$ A)
229CC	.0120
229CCSF	.0120

Center conductor is captivated.  
Standard finish is passivated.

# SMK 2.92mm Flange Mount

## 227CC

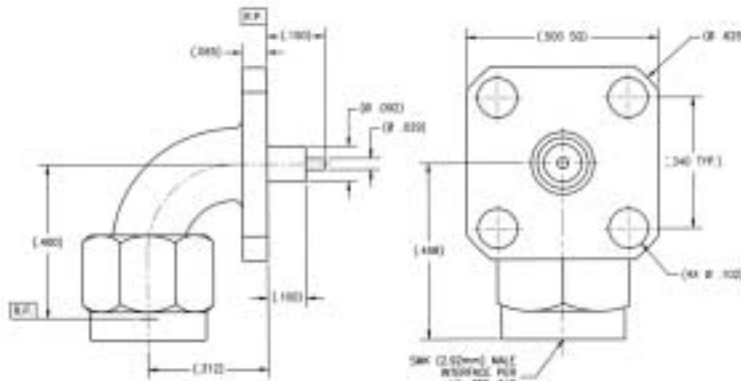
SMK 2.92mm female radius right angle 4 hole flange (.500 SQ) mount to straight termination



Center conductor is captivated.  
Standard units are gold finish.

## 228CC

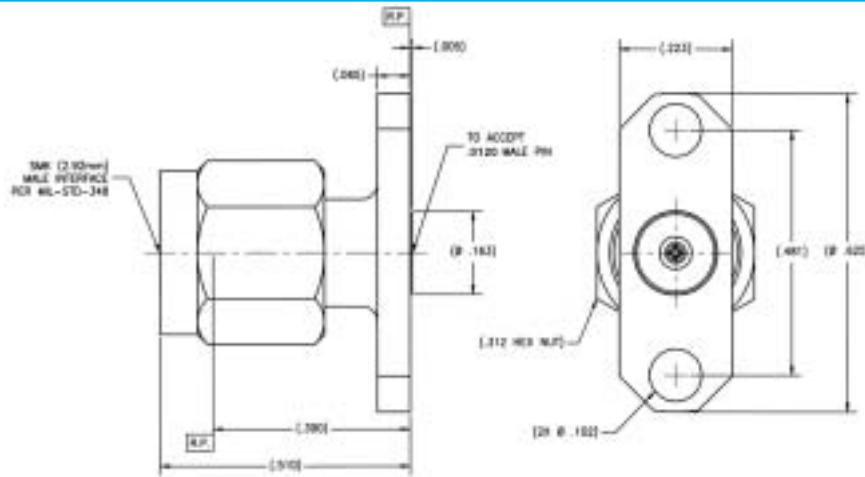
SMK 2.92mm male radius right angle 4 hole flange (.500 SQ) mount to straight termination



Center conductor is captivated.  
Standard units are gold finish.

## 219CC

Male 2 hole flange mount, field replaceable

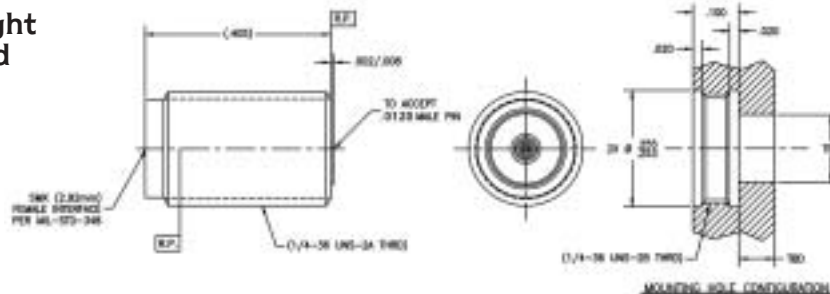


Center conductor is captivated.  
Standard units are gold finish.

# SMK 2.92mm Spark Plug

## 240CC

SMK 2.92mm female straight bulkhead feedthrough, field replaceable

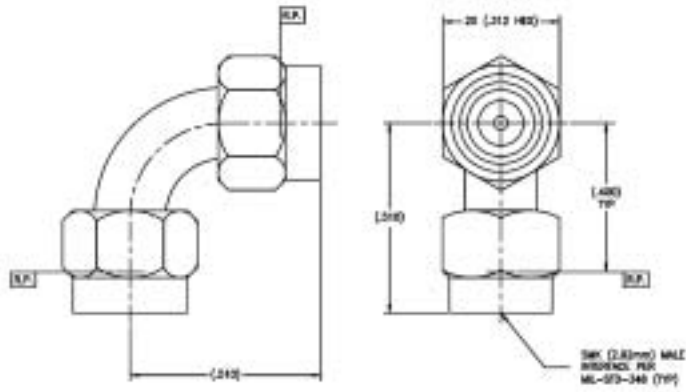


Center conductor is captivated.  
Standard units are gold finish.

# SMK 2.92mm In-series adapters

## 220CC

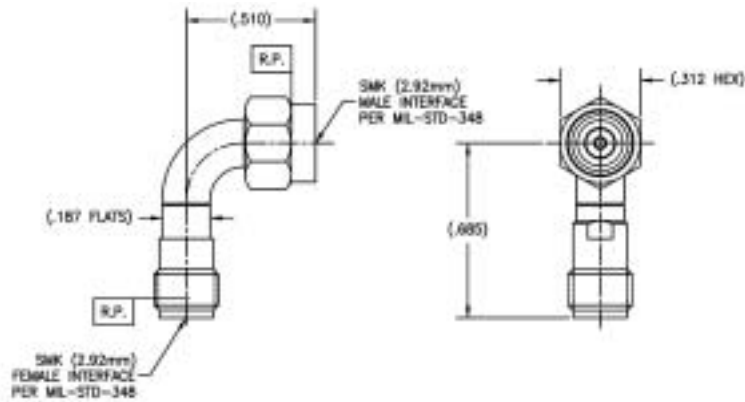
Right Angle, MA/MA  
In-Series Adapter



Center conductor is captivated.  
Standard units are gold finish.

## 221CC

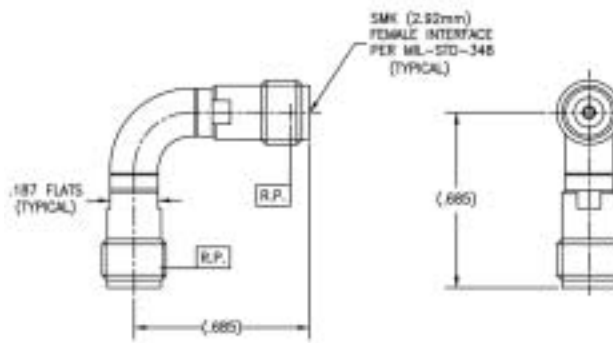
Right Angle, FE/MA  
In-Series Adapter



Center conductor is captivated.  
Standard units are gold finish.

## 222CC

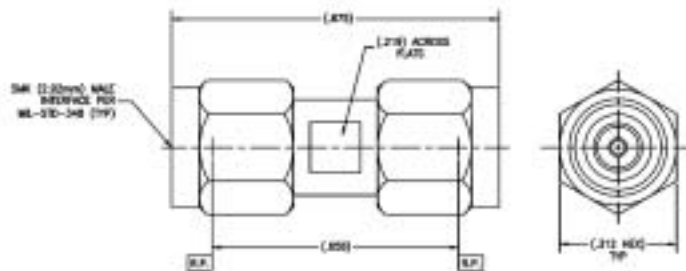
Right Angle, FE/FE  
In-Series Adapter



Center conductor is captivated.  
Standard units are gold finish.

## 223CC

Straight MA/MA  
In-Series Adapter



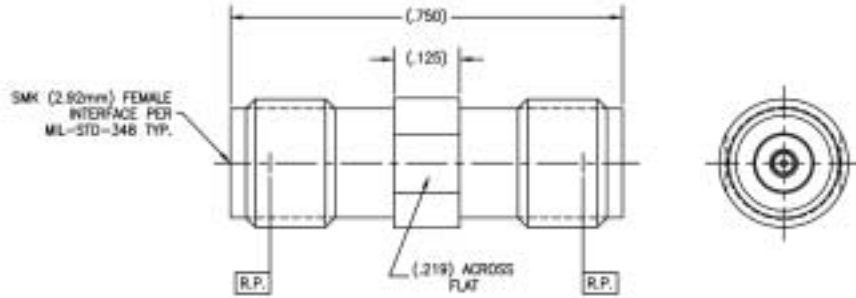
Center conductor is captivated.  
Standard units are gold finish.



# SMK 2.92mm Straight adapters

## 224CC

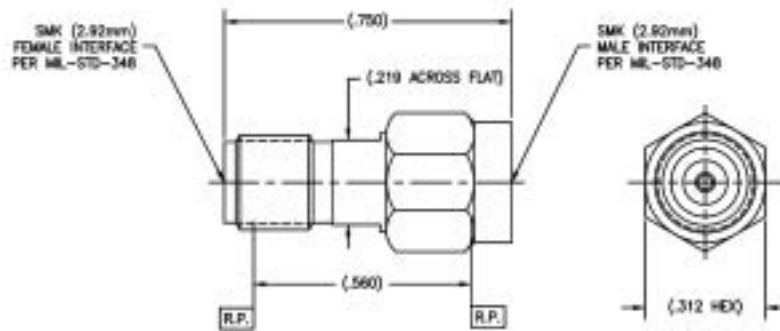
SMK 2.92mm female to female straight adapter



Center conductor is captivated.  
Standard units are gold finish.

## 225CC

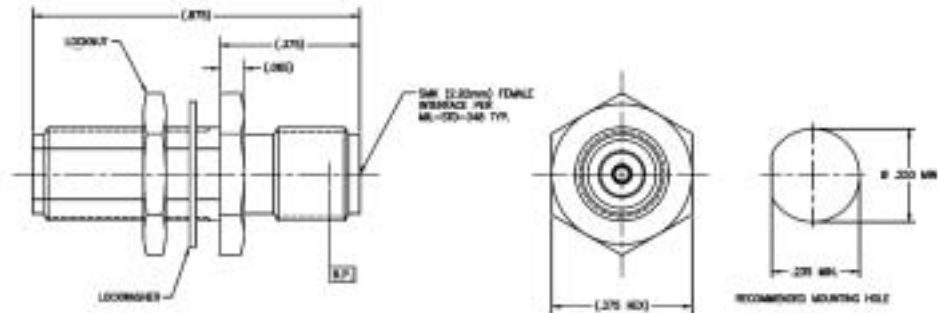
SMK 2.92mm female to male straight adapter



Center conductor is captivated.  
Standard units are gold finish.

## 226CC

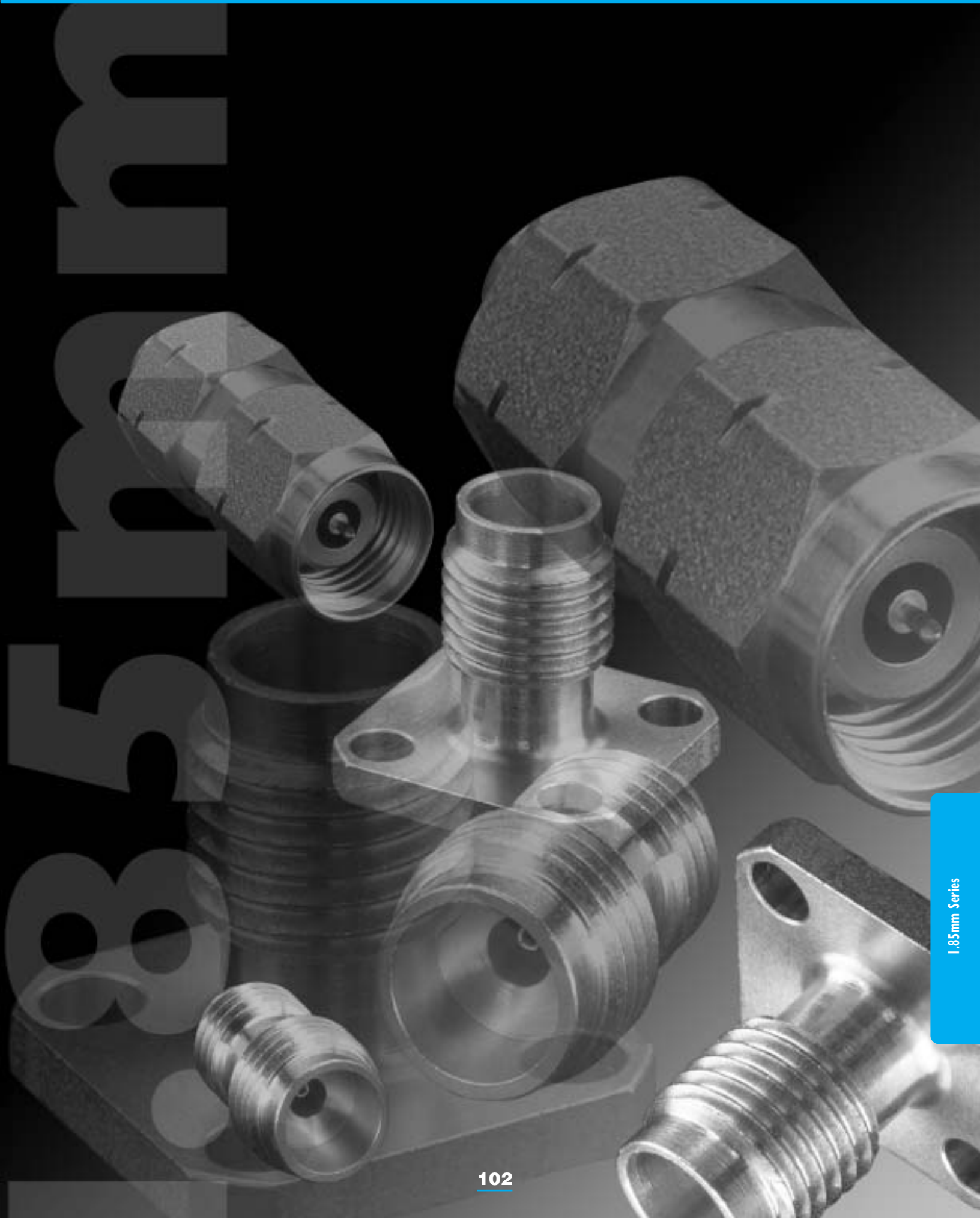
SMK 2.92mm female to female bulkhead straight adapter



Center conductor is captivated.  
Standard units are gold finish.

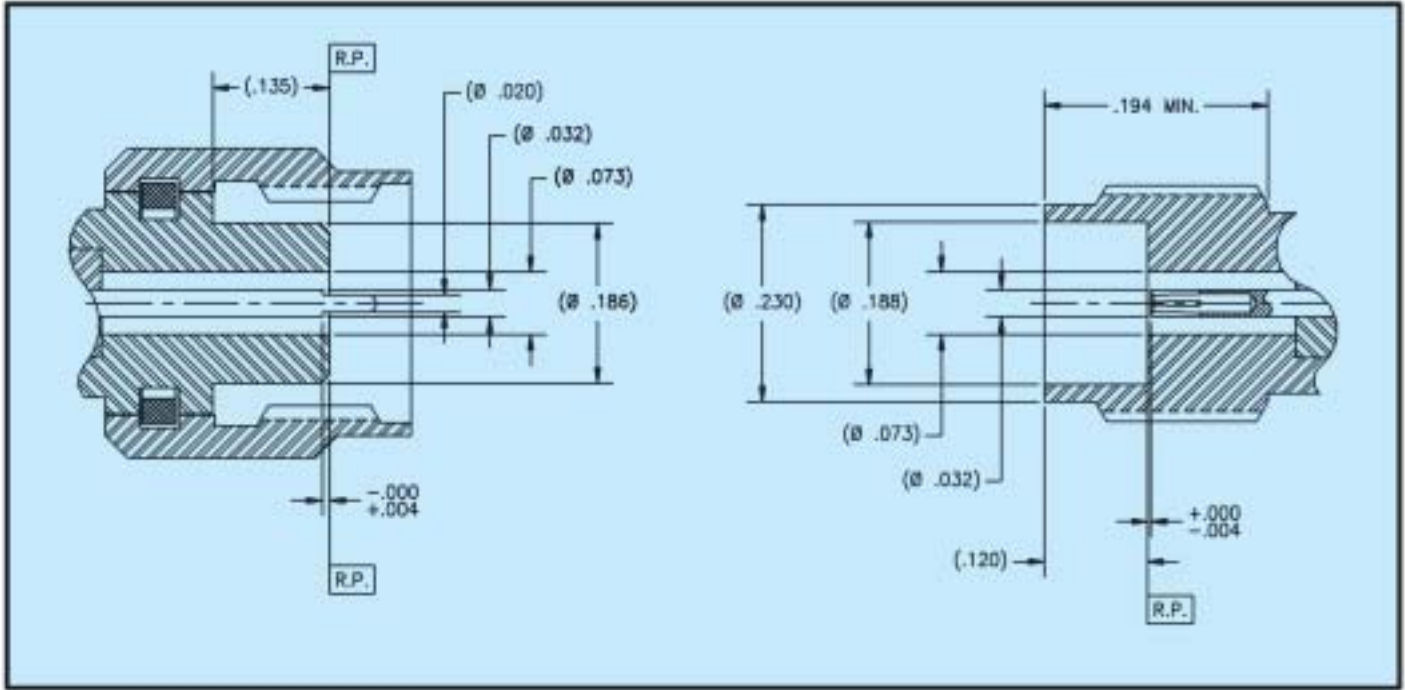
SMK 2.92mm Straight Adapters

# 1.85mm Series



1.85mm Series

# 1.85mm Interface Mating Dimensions (Per MIL-STD-348)



## Note(s):

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
3. Dimension prior to slotting.

# 1.85mm Specifications

The specifications below are general specifications for all 1.85mm connectors. Specific specifications for VSWR, insertion loss, and RF leakage for each connector is

available from the factory upon request. Specifications in the following table are recommended for any procurement documents or drawings.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, AMS 5567, AMS 5370 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PPO™ (Polyphenolic Oxide) Teflon per ASTM D-1457 or D-1710 Silicone Rubber per ZZ-R-765, CLASS IIB, 50-60 Shore.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Impedance	50 Ohms Nominal
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 2 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	60 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	15 in.-lbs. minimum. Applicable to male connectors only.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B.
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

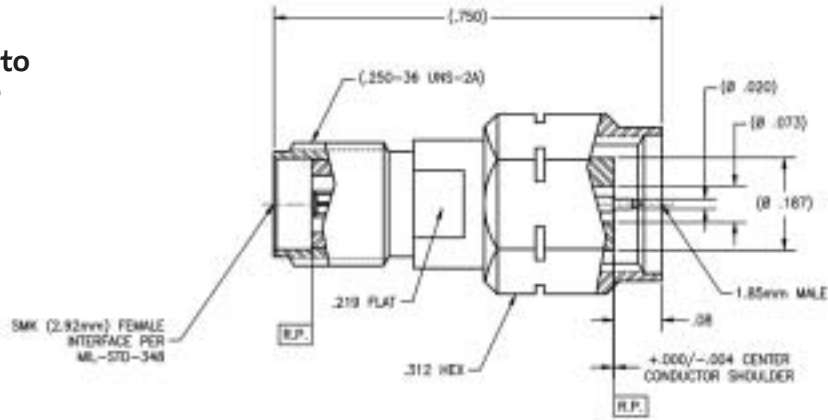
Complete specifications on every connector in this catalog are available from the factory.



# 1.85mm Adapters

## V203-ICC

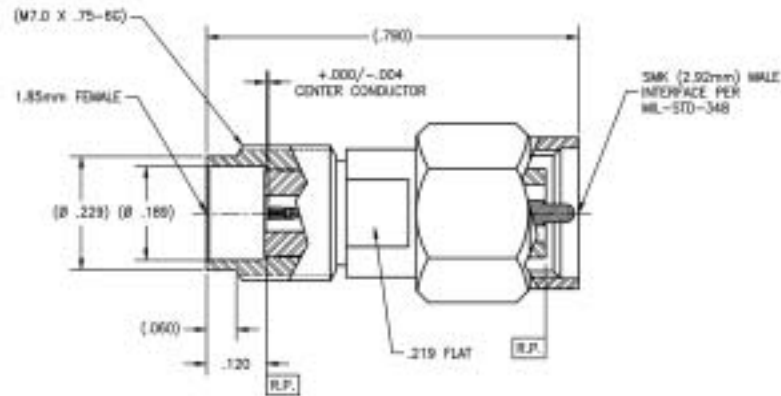
1.85mm male straight to SMK (2.92mm) female adapter



Center conductor is captivated.  
Standard units are gold finish.

## V204-ICC

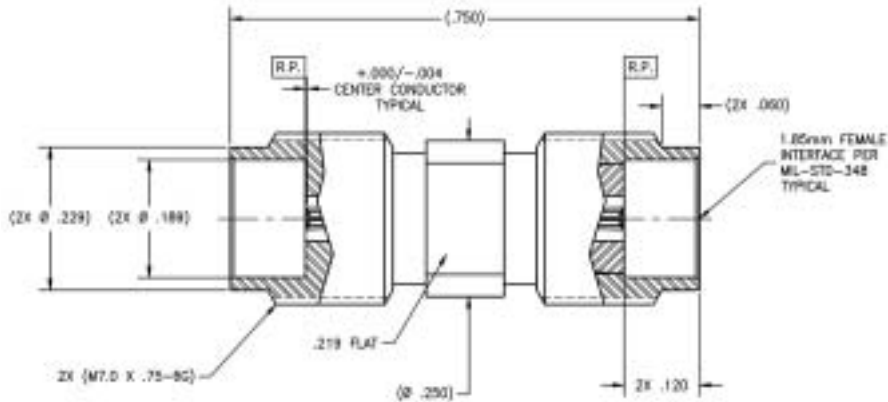
1.85mm female straight to SMK (2.92mm) male adapter



Center conductor is captivated.  
Standard units are gold finish.

## V205-ICC

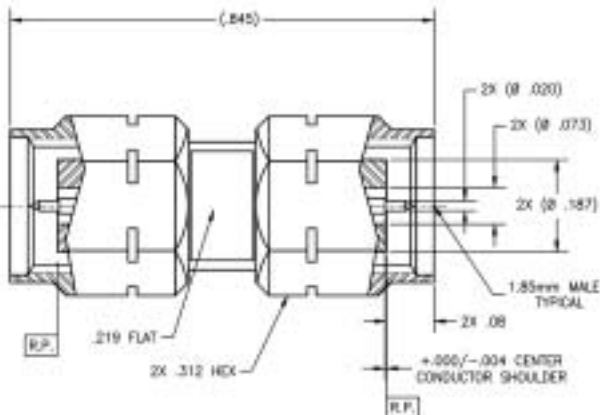
1.85mm female straight to 1.85mm female adapter



Center conductor is captivated.  
Standard units are gold finish.

## V206-ICC

1.85mm male straight to 1.85mm male adapter

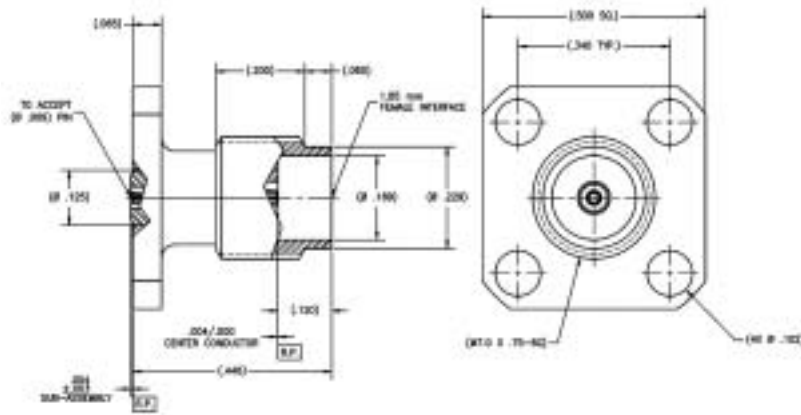


Center conductor is captivated.  
Standard units are gold finish.

# 1.85mm Field Replaceable

## V200-1CC

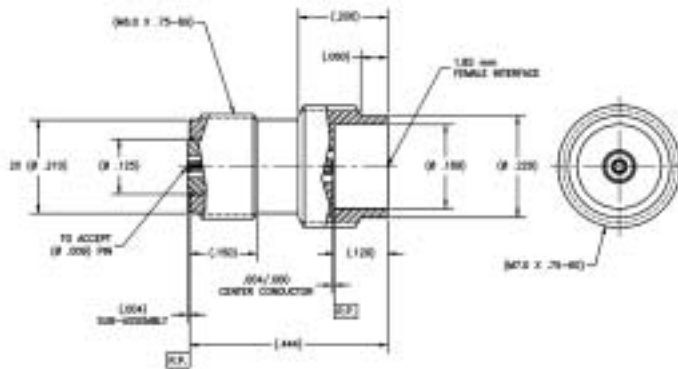
1.85mm female 4 hole flange mount field replaceable



Center conductor is captivated.  
Standard units are gold finish.

## V202-1CC

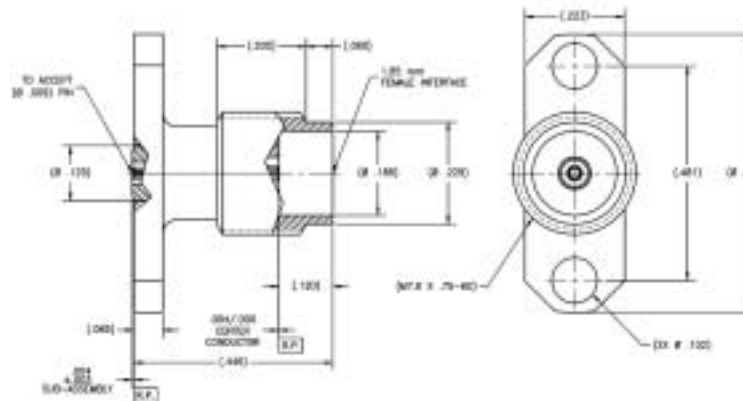
1.85mm female bulkhead field replaceable



Center conductor is captivated.  
Standard units are gold finish.

## V208-1CC

1.85mm female 2 hole flange mount field replaceable

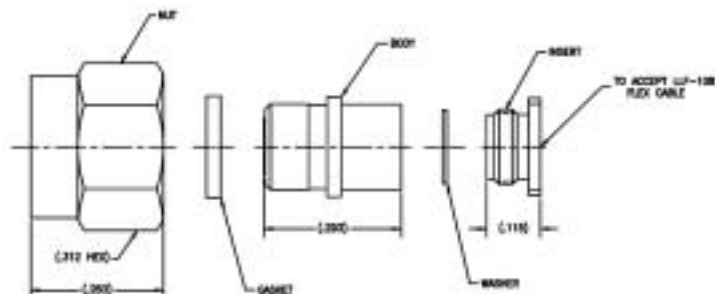


Center conductor is captivated.  
Standard units are gold finish.

# 1.85mm Cable Connector

## V213-1CC

V male to LLF-1087 flex cable



Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

**Tensolite**

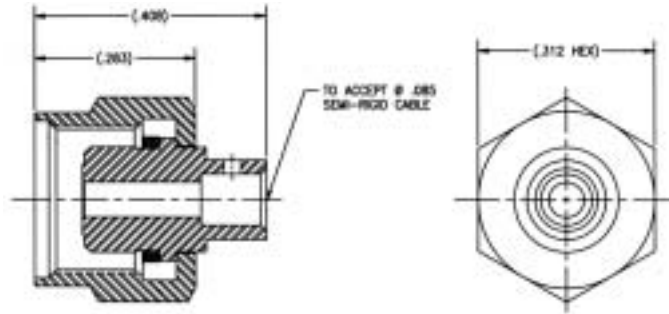
A CARLISLE Company

Call: 866-282-4708 Website: [www.tensolite.com](http://www.tensolite.com)

# 1.85mm Cable Connector

## V214-ICC

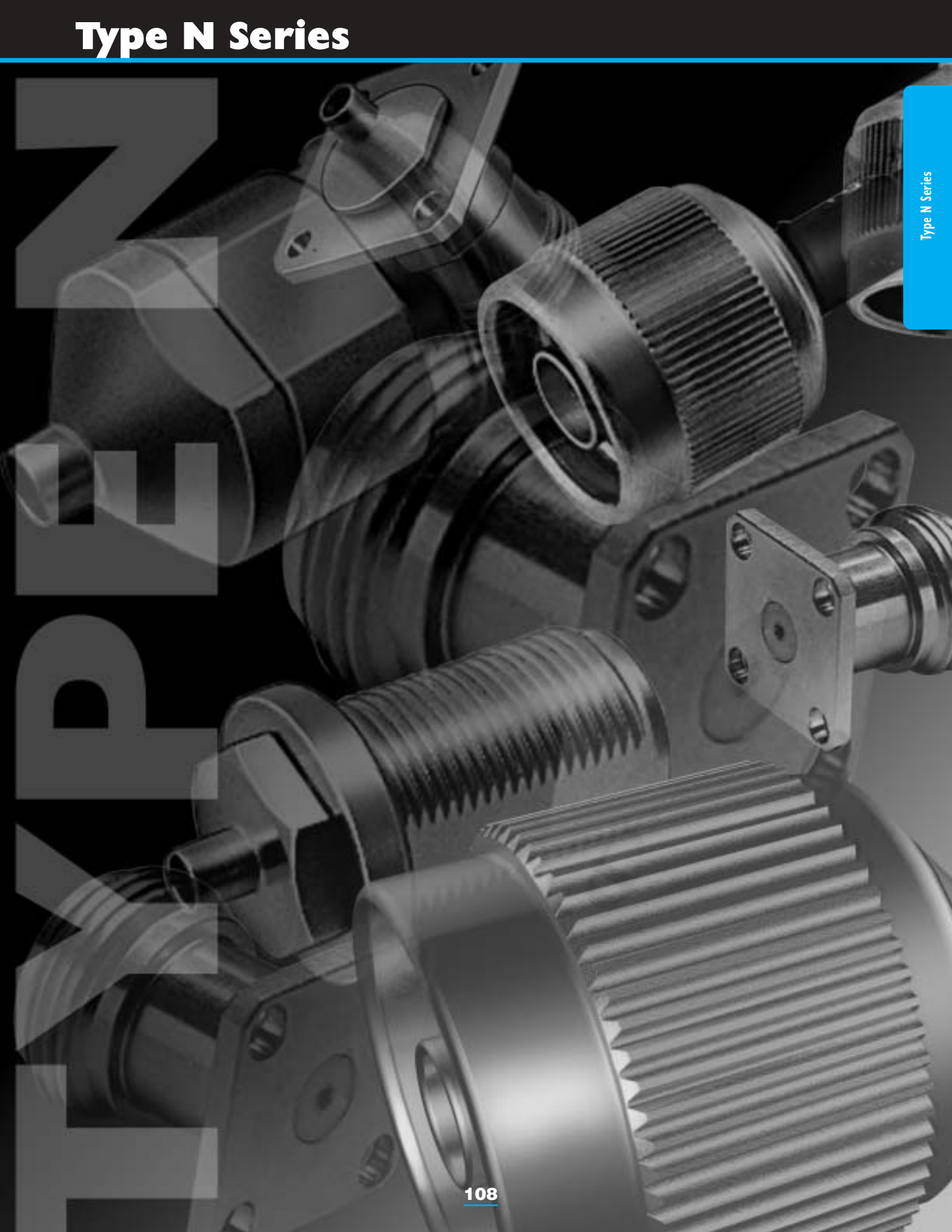
1.85 mm male  
straight to Ø .085  
Semi-Rigid cable



Center conductor is captivated.  
Standard units are gold finish.

Consult factory for Assembly Instructions

# Type N Series

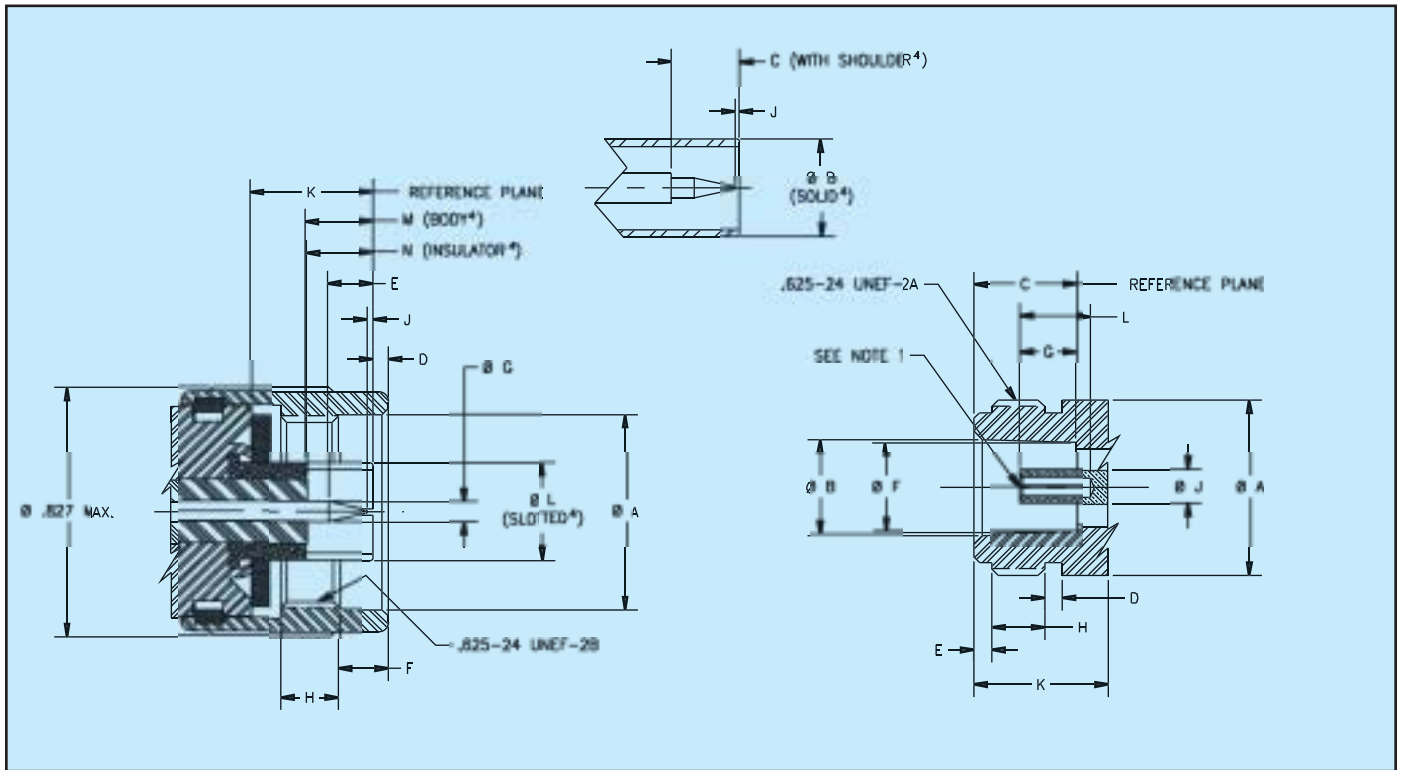


Type N Series

TYPE N



# Type N Interface Mating Dimensions



## MALE

## FEMALE

LTR	Inches/Millimeters <sup>3</sup>					
	Minimum		Nominal		Maximum	
	in.	mm	in.	mm	in.	mm
∅A	.630	16.00	—	—	—	—
∅B	.3130	7.95	—	—	.3158	8.03
C	.210	5.33	.220	5.59	.230	5.84
D	.016	0.14	.050	1.27	.060	1.52
E	.110	2.79	.150	3.81	.140	3.56
F	.158	4.01	.163	4.14	.168	4.27
∅G	.063	1.60	.0650	1.65	.066	1.68
H	.177	4.50	—	—	—	—
J	.003	0.08	—	—	—	—
K	.398	10.11	.405	10.29	.412	10.46
∅L	—	—	—	—	.330	8.38
M	.223	5.66	—	—	—	—
N	.223	5.66	—	—	—	—

LTR	Inches/Millimeters <sup>3</sup>					
	Minimum		Nominal		Maximum	
	in.	mm	in.	mm	in.	mm
∅A	—	—	—	—	.627	15.93
∅B	.336	8.53	.340	8.64	.344	8.74
C	.356	9.04	.359	9.12	.362	9.20
D	.047	1.19	.062	1.57	.077	1.96
E	.047	1.19	.062	1.57	.077	1.96
∅F	.316	8.03	.318	8.08	.320	8.13
G	.187	4.75	.197	5.00	.207	5.26
H	.172	4.37	.182	4.62	.202	5.13
∅J	.119	3.02	.120	3.05	.124	3.15
K	.422	10.72	—	—	—	—
L	.210	5.33	.226	5.74	.231	5.87

### Notes:

1. I.D. to meet VSWR and contact resistance when mated with .065 +.0008/-.0005 inches (.1651 +.0203/-.0127 millimeters) diameter pin.
2. When fully engaged, the two reference planes must coincide with metal-to-metal contact.
3. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.
4. Consult factory for specific design.

# Type N Specifications

The specifications below are general specifications for Type N connectors. Specific data is available from the factory upon request. The General, Electrical, Mechanical and Environmental Specifications in the following table are recommended for any procurement documents or drawings.

In the event of any conflict between requirements of the text specifications, General Specification MIL-PRF-39012 and the details of this table, the latter shall govern. These specifications are subject to change according to the latest revision of Specification MIL-PRF-39012.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, ASTM A-743, ASTM A-744 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per MIL-R-5847 and ZZ-R-765.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megaohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 6 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	100 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	30 in.-lbs. minimum. Applicable to male connectors only.
Cable Retention Force	See specific connector data sheet.
Mating Characteristics	See interface dimensions shown. Applicable to females only: oversize pin .0670 +.0001/-.0000 diameter .125 deep; Insertion force 2 lbs. maximum with .0658 minimum diameter pin; withdrawal force 2 oz. minimum with .0645 maximum diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Recommended Mating Torque	15 inch-pounds minimum
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition B
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B. The salt solution shall be five percent
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megaohms min. within 5 minutes after removal from humidity.

Complete specifications on every connector in this catalog are available from the factory.



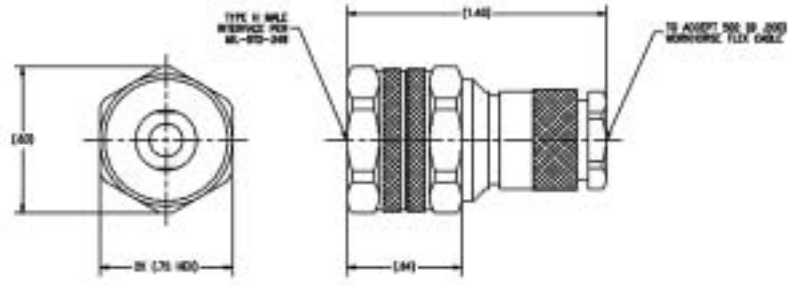




# Type N Connectors

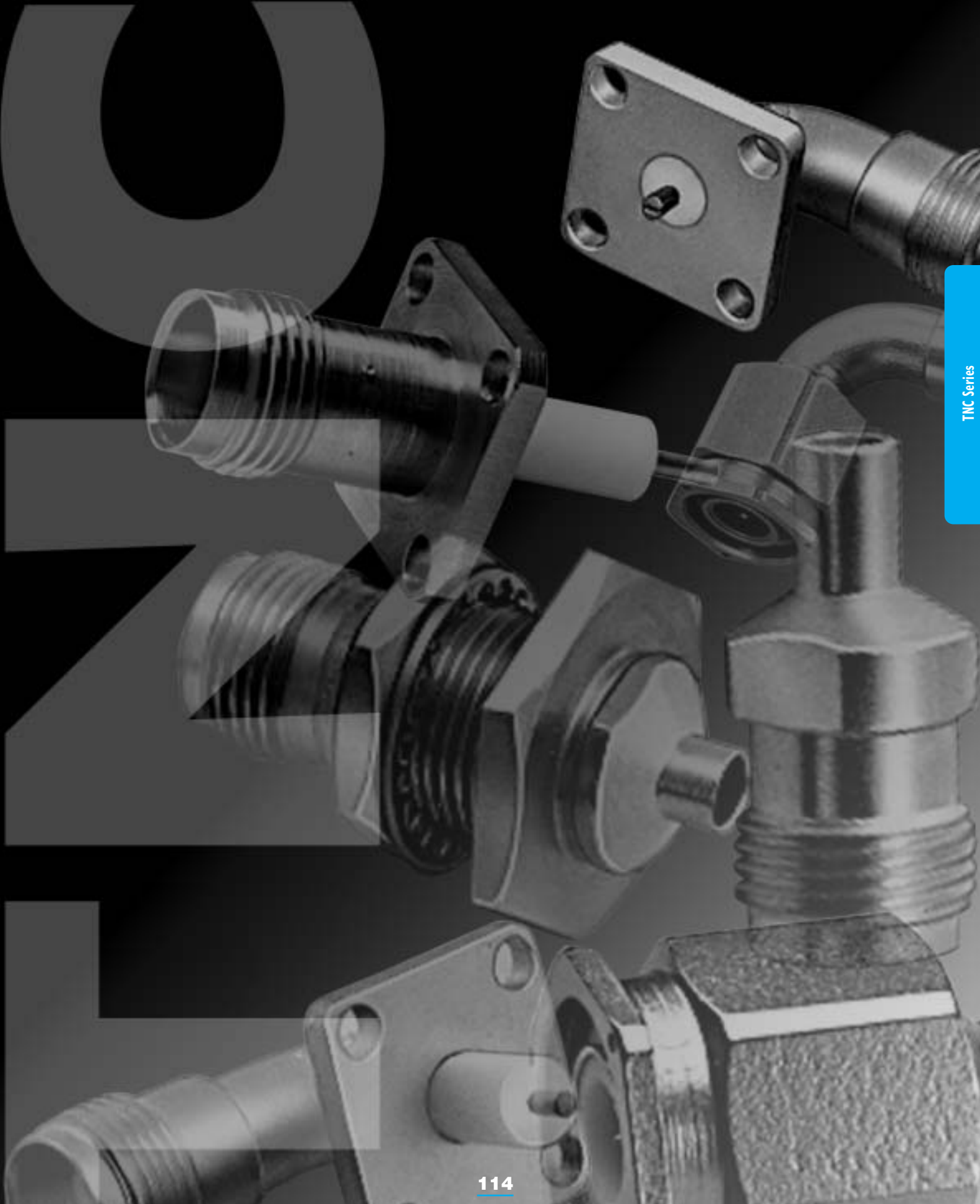
## 8091-1CCSF

Type N male “Secure RF” straight to 504 (Ø .200) Workhorse flex cable



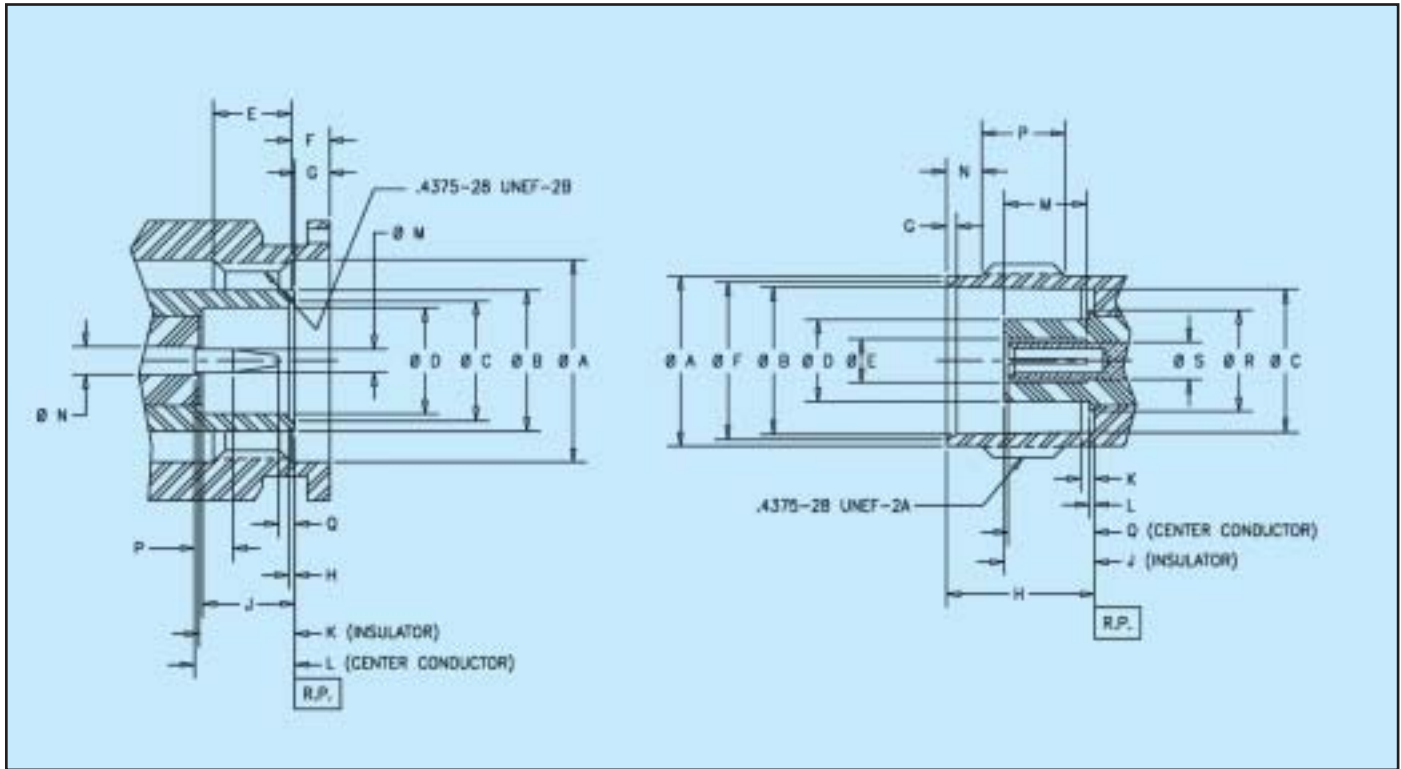
Consult factory for Assembly Instructions

# TNC Series



TNC Series

# TNC Interface Mating Dimensions (Per MIL-STD-348)



## MALE

## FEMALE

LTR	Inches/Millimeters <sup>3</sup>					
	Minimum		Nominal		Maximum	
	in.	mm	in.	mm	in.	mm
ØA	.440	11.17	—	—	—	—
ØB	.314	7.98	.315	8.00	.318	8.08
ØC	.266	6.76	.267	6.78	.268	6.81
ØD	.238	6.05	.240	6.10	.242	6.15
E	.156	3.96	—	—	—	—
F	.063	1.60	—	—	—	—
ØG	—	—	—	—	.078	1.02
ØH	.006	0.15	.008	0.19	.009	0.23
ØJ	.208	5.28	—	—	.212	5.39
K	.208	5.28	.213	5.41	.218	5.54
L	.208	5.28	.214	5.44	.219	5.56
ØM	.052	1.32	.053	1.35	.054	1.37
ØN	.064	1.63	.065	1.65	.066	1.68
P	.078	1.98	—	—	—	—
Q	.003	0.08	.040	1.02	.080	2.03

LTR	Inches/Millimeters <sup>3</sup>					
	Minimum		Nominal		Maximum	
	in.	mm	in.	mm	in.	mm
ØA	.378	9.60	.380	9.65	.381	9.68
ØB	.327	8.31	.330	8.38	.333	8.46
ØC	.319	8.10	.320	8.13	.321	8.15
ØD	.182	4.62	.184	4.67	.186	4.72
ØE	—	—	—	—	.092	2.34
ØF	.346	8.79	.351	8.92	.356	9.04
G	.015	0.38	.023	0.58	.030	.076
H	.327	8.31	—	—	.335	8.51
J	.198	5.03	.202	5.13	.208	5.28
K	.026	0.66	.031	0.79	.036	0.91
L	—	—	—	—	.006	0.15
M	.180	4.67	.185	4.70	.190	4.72
N	.068	1.73	.078	1.98	.088	2.24
P	.187	4.75	—	—	—	—
Q	.198	5.03	.202	5.13	.208	5.28
ØR	—	—	—	—	.266	6.76
ØS	.083	2.11	.084	2.13	.086	2.18

**Notes:**

1. I.D. to meet VSWR and contact resistance when mated with .053 +/- .001 inches (1.3462 +/- .0254 millimeters) diameter pin.
2. When fully engaged, the two reference planes must coincide with metal-to-metal contact.
3. Metric equivalents (to the nearest 0.01mm) are given for general information only and are based on 1 inch = 25.4 millimeters.

# TNC Connectors Semi-Rigid Cable Connectors

The specifications below are general specifications for TNCA connectors. Specific data is available from the factory upon request. The General, Electrical, Mechanical and Environmental Specifications in the following table are recommended for any procurement documents or drawings.

In the event of any conflict between requirements of the text specifications, General Specification MIL-PRF-39012 and the special details of this table, the latter shall govern. These specifications are subject to change according to the latest revision of Specification MIL-PRF-39012.

Requirement	Specifications
<b>General</b>	
Material	Steel corrosion resistant per ASTM A-582, 300 Series, ASTM A-743, ASTM A-744 Brass Alloy per ASTM B-16 Beryllium copper per ASTM B-196 or B-197 PTFE Fluorocarbon per ASTM D-1457 Silicone Rubber per MIL-R-5847 and ZZ-R-765.
Finish	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ASTM B-488, Type 2, Code C over nickel underplate. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	The design shall be such that the outline dimensions in this catalog are met. In addition, the assembled connector shall meet the interface dimensions. Dimensions are reference only unless stated.
<b>Electrical</b>	
Insulation Resistance	The insulation resistance shall not be less than 5,000 megohms.
Dielectric Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
RF High Potential Withstanding Voltage	Refer to applicable military slash sheet or consult factory.
Contact Resistance	Refer to applicable military slash sheet or consult factory.
Voltage Standing Wave Ratio (VSWR)	Refer to applicable military slash sheet or consult factory.
RF Leakage	Refer to applicable military slash sheet or consult factory.
Insertion Loss	Refer to applicable military slash sheet or consult factory.
Corona Level	Refer to applicable military slash sheet or consult factory.
<b>Mechanical</b>	
Force to Engage and Disengage	The torque required to engage and disengage shall not exceed 2 inch-pounds. The longitudinal force is not applicable.
Coupling Nut Retention Force	100 lbs. minimum. Applicable to male connectors only.
Coupling Proof Torque	15 in.-lbs. minimum. Applicable to male connectors only.
Cable Retention Force	Refer to applicable military slash sheet or consult factory.
Mating Characteristics	See interface dimensions shown. Applicable to females only: oversize pin .0550 +.0001/-.0000 diameter .125 deep; Insertion force 2 lbs. maximum with .054 minimum diameter pin; withdrawal force 2 oz. minimum with .052 maximum diameter pin.
Connector Durability	The connector to be tested and its mating connector shall be subjected to 500 insertion and withdrawal cycles at 12 cycles per minute max. The connector shall show no evidence of mechanical failure and the connector shall meet the mating characteristic requirements.
Recommended Mating Torque	12-15 inch-pounds.
<b>Environmental</b>	
Vibration	Specification MIL-STD-202, Method 204, Test Condition B.
Shock	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	Refer to applicable military slash sheet or consult factory.
Corrosion (Salt Spray)	Specification MIL-STD-202, Method 101, Test Condition B. The salt solution shall be five percent
Moisture Resistance	Specification MIL-STD-202, Method 106. No measurement at high humidity. Insulation resistance shall be 200 megohms min. within 5 minutes after removal from humidity.

Complete specifications on every connector in this catalog are available from the factory.

# TNC Connectors

## 9009

Straight male cable

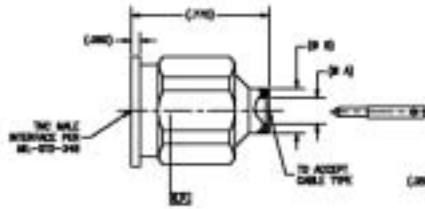


Figure 1

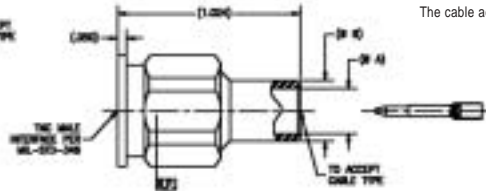


Figure 2

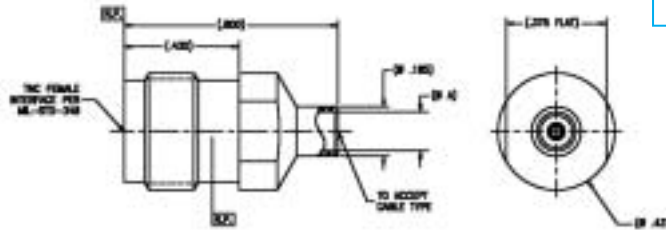
Tensolite Part Number	"A"	Semi-Rigid Cable Type	Fig.
9009-1SF	.143 min.	.141	1
9009-2SF	.088 min.	.085	1
9009-3SF	.143 min.	.141*	1
9009-4SF	.253 min.	.250	2

\*Microporous  
Standard units have stainless steel finish.  
The cable adapter section is gold plated for solderability.

Consult factory for Assembly Instructions

## 9010

Straight cable female



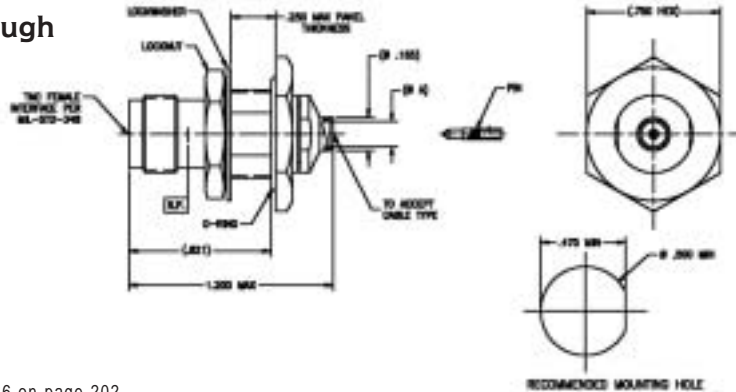
Tensolite Part Number	"A"	Semi-Rigid Cable Type
9010-1	.143 min.	.141
9010-2	.088 min.	.085
9010-3	.143 min.	.141*

\*Microporous  
Standard units are gold plated.

Consult factory for Assembly Instructions

## 9011

Bulkhead feedthrough cable female



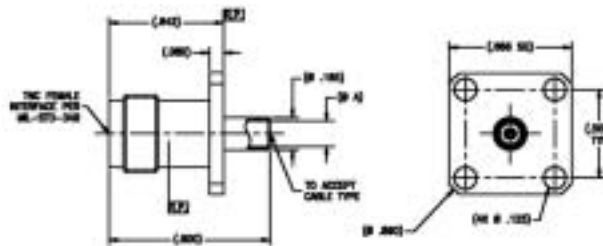
Tensolite Part Number	"A"	Semi-Rigid Cable Type
9011-1SF	.143 min.	.141
9011-2SF	.088 min.	.085
9011-3SF	.143 min.	.141*

\*Microporous  
Standard units have stainless steel finish.  
The cable adapter section is gold plated for solderability.

Refer to Assembly Instruction 136 on page 202

## 9012

Flange mount cable female



Tensolite Part Number	"A"	Semi-Rigid Cable Type
9012-1	.143 min.	.141
9012-2	.088 min.	.085
9012-3	.143 min.	.141*

\*Microporous  
Standard units are gold plated.

Refer to Assembly Instruction 159 on page 203

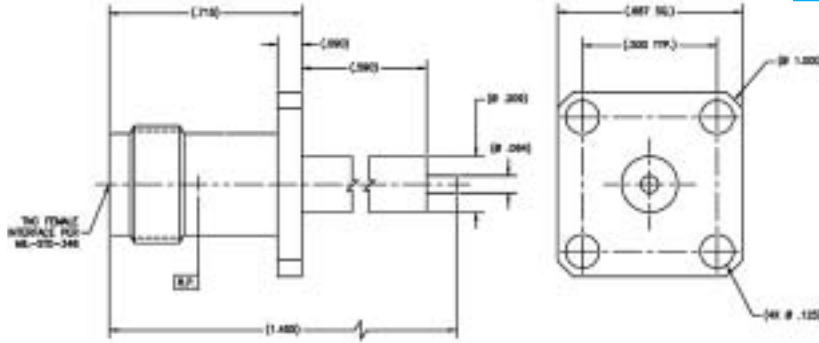




# TNC Connectors

## 9028

Straight termination  
panel mount female

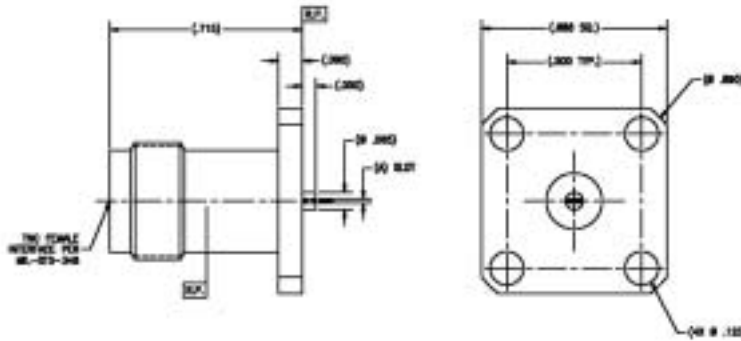


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
9028CCSF	1.25:1

Center conductor is captivated.  
Standard finish is passivated.

## 9045

Slot termination  
flange mount female

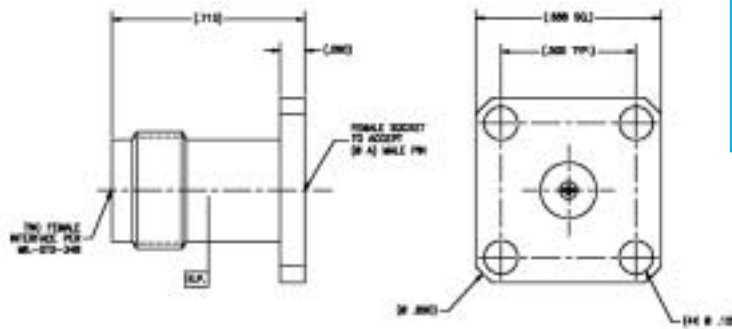


Tensolite Part Number	Max. VSWR DC - 18.0 GHz 1.25:1 "A" Slot, +.003/-0.01
9045-1CCSF	.012
9045-2CCSF	.018
9045-3CCSF	.028
9045-4CCSF	.038

Center conductor is captivated.  
Standard finish is passivated.

## 9080

Female contact  
termination panel mount female

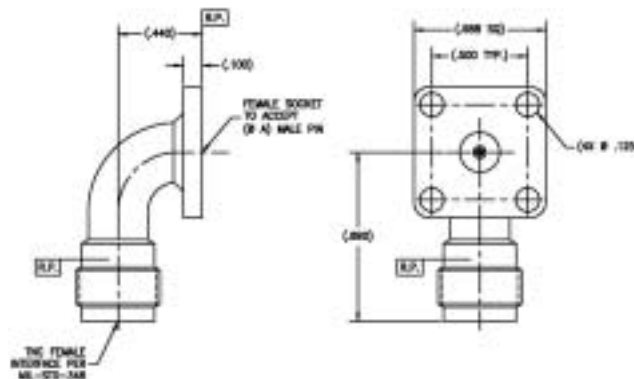


Tensolite Part Number	Max. VSWR DC - 18.0 GHz 1.25:1 "A" Dia. ± .0005
9080-1CCSF	.036
9080-2CCSF	.020
9080-3CCSF	.010
9080-4CCSF	.012
9080-5CCSF	.015
9080-6CCSF	.018

Center conductor is captivated.  
Standard finish is passivated.

## 9042

Radius right angle  
flange mount female



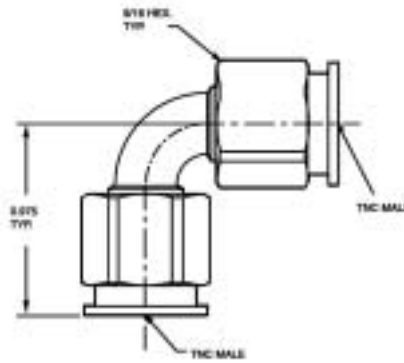
Tensolite Part Number	Max. VSWR DC - 18.0 GHz 1.25:1 "A" Dia. ± .0005
9042-1CCSF	.036
9042-2CCSF	.020
9042-3CCSF	.010
9042-4CCSF	.012
9042-5CCSF	.015
9042-6CCSF	.018

Center conductor is captivated.  
Standard finish is passivated.

# TNC Connectors In-Series Adapters

## 9052CCSF

Radius right angle  
male to male adapter

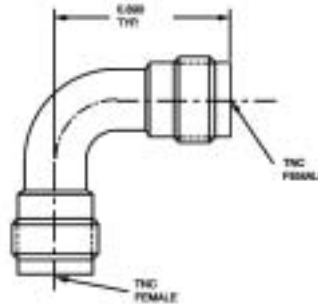


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
9052CCSF	1.08 + .009 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 9051CCSF

Radius right angle  
female to female adapter

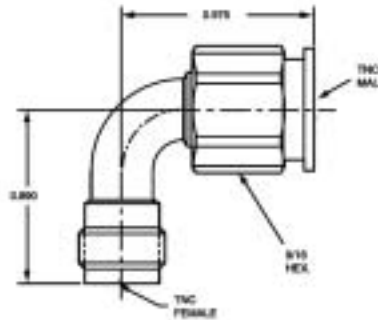


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
9051CCSF	1.08 + .009 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 9050CCSF

Radius right angle  
female to male adapter



Tensolite Part Number	Max. VSWR DC - 18.0 GHz
9050CCSF	1.08 + .009 fGHz

Center conductor is captivated.  
Standard finish is passivated.



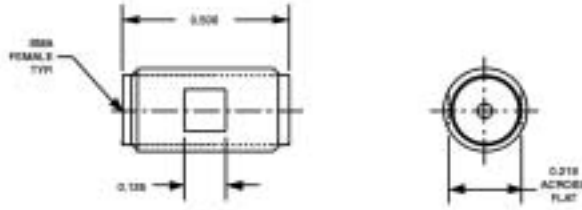
ADAPTERS



# Adapters SMA

## 5191CC

Female to female adapter

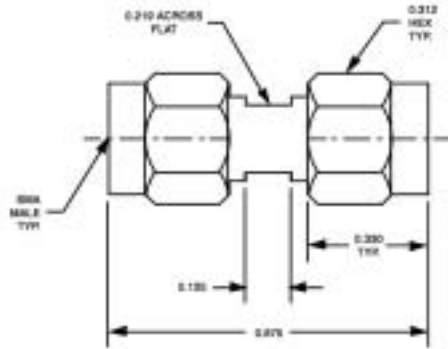


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5191CC	1.05 + .005 fGHz

Center conductor is captivated.  
Standard units are gold finish.

## 5390CC

Male to male adapter

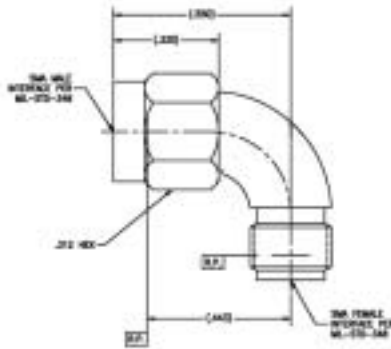


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5390CC	1.05 + .005 fGHz

Center conductor is captivated.  
Standard units are gold finish.

## 5490

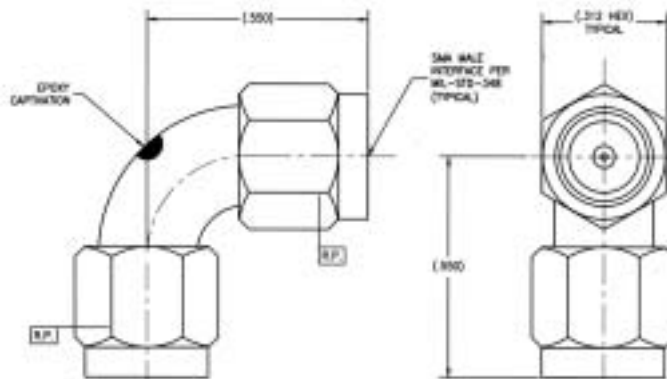
Radius right angle male to female adapter



Standard units are gold finish.  
Add suffix CC to Part No. for captivated contact.

## 5065

Male to female adapter (Connector Saver)



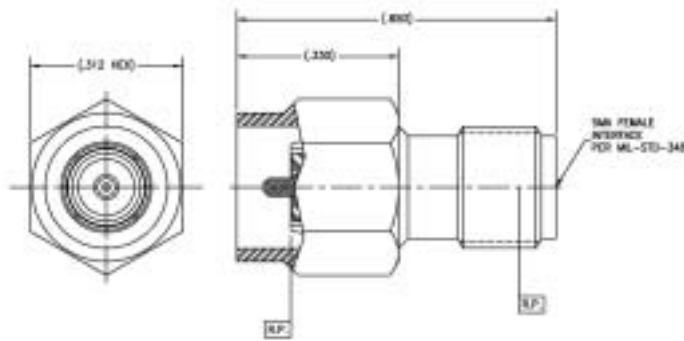
Standard units are gold finish.  
Add suffix CC to Part No. for captivated contact.

SMA Adapters

# Adapters SMA

## 5299CC

Male to female adapter (Connector Saver)



Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5299CC	1.05 + .005 fGHz

Center conductor is captivated. Standard units are gold finish.

## 5299-O-1CCSF

Male to female adapter (Connector Saver)

Frequency Range: DC to 26.5 GHz

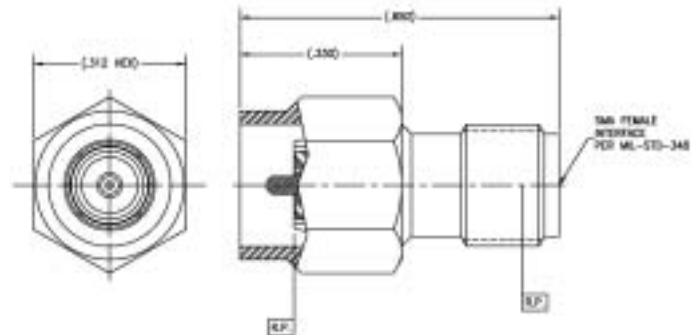
Voltage Standing

Wave Ratio: 1.06+.005 fGHz



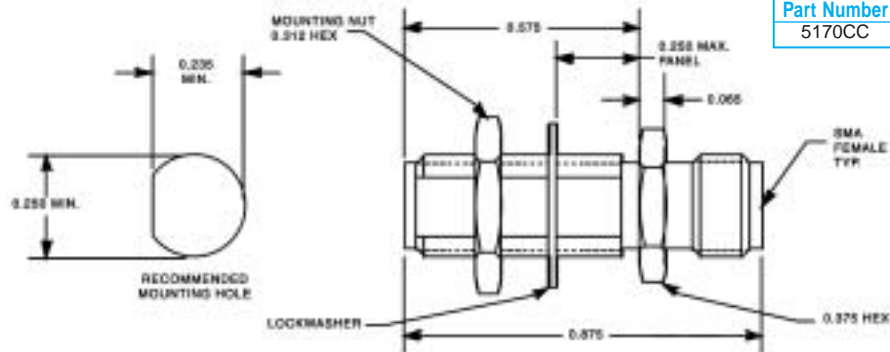
The Push-On "Connector Saver" was developed to eliminate the time consuming tightening, torquing and loosening of SMA connectors during test.

The standard SMA female end engages the SMA male of the cable assembly, while the Push-On end of the adapter slides directly on to any SMA female, allowing quick connection and disconnect.



## 5170CC

Female to female adapter bulkhead feedthrough

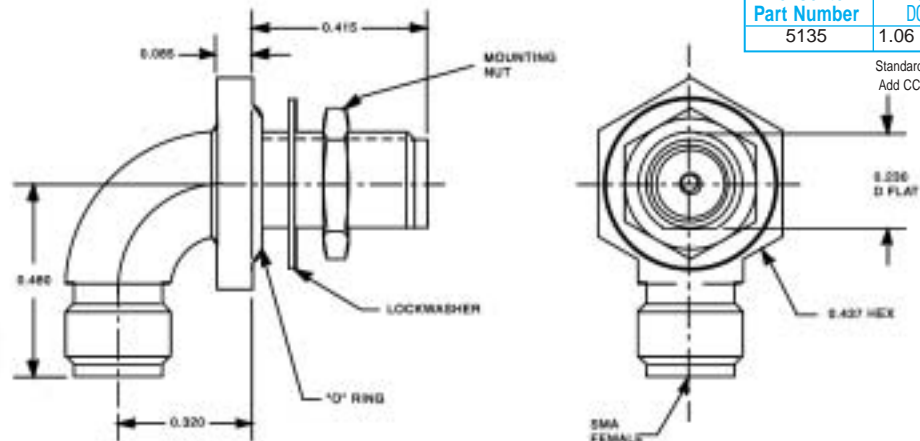


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5170CC	1.05 + .005 fGHz

Center conductor is captivated. Standard units are gold finish.

## 5135

Radius right angle female to female adapter bulkhead feedthrough



Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5135	1.06 + .005 fGHz

Standard units are gold finish. Add CC for captivated contact

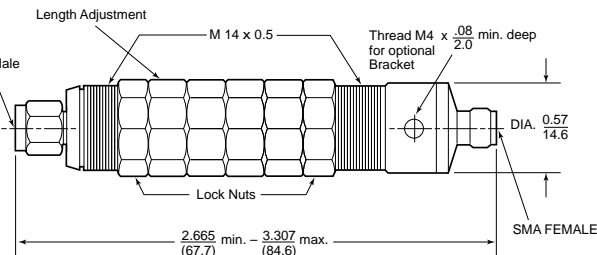
# Adapters SMA

## 5018CCSF

### Female to male phase adjustable adapter

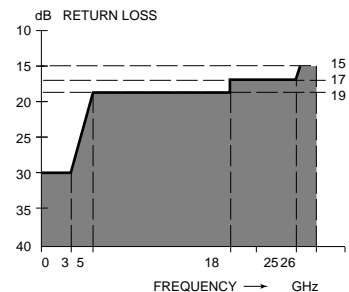
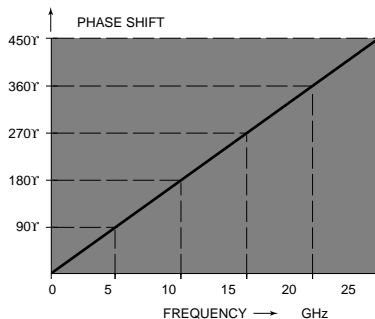


The Tensolite Model 5018CCSF is a coaxial phase shift adapter, inserted in an SMA<sup>MA</sup>-Male terminated line to electrically separate the other components. These bi-directional "line stretchers" travel length is 0.6 in. (15.3 mm) electrically and mechanically. Lock nuts retain the calibrated phase adjustment, and 50 ohms impedance is maintained over the range.



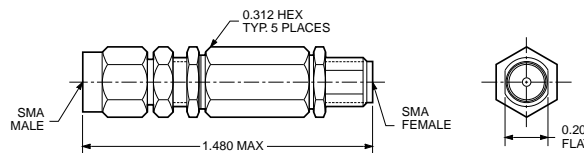
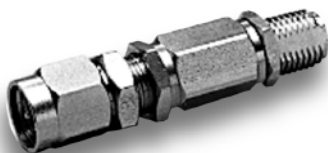
Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5018CCSF	See graph below

Center conductor is captivated.  
Standard finish is passivated.



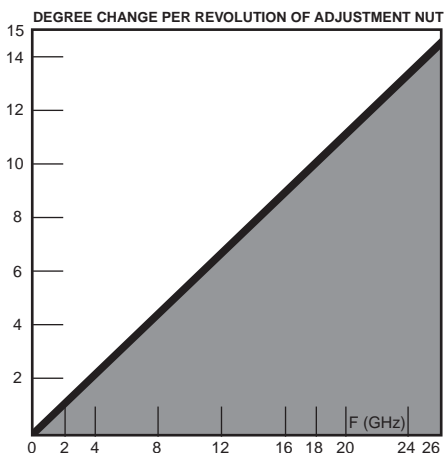
## 5998CCSF

### Female to Male Phase Adjustable Adapter

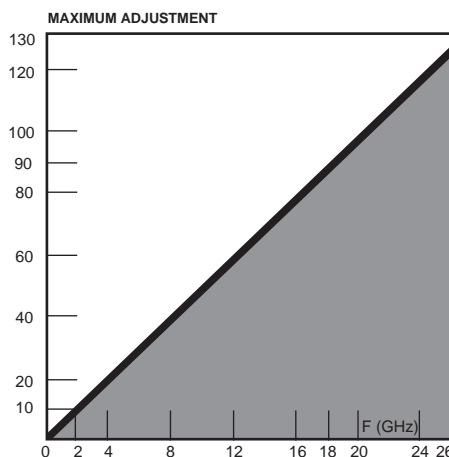


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5998CCSF	1.05 + .008 fGHz

Center conductor is captivated.  
Standard finish is passivated.



Physical length change per revolution of adjustment nut: .018 inch  
Electrical length change per revolution of adjustment nut: .0127



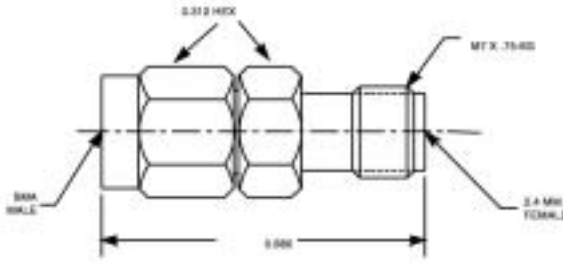
Max. change in physical length: .160 .010 inch of air.  
Max. change in electrical length: .113 .007 inch of PTFE.

The Tensolite Model 5998 coaxial phase shift adapter mates in-series with SMA Male and Female connectors, and allows resettable phase adjustments (up to 126 deg. @ 26 GHz) to alter the electrical distance between other components in cable/connector RF lines. Insertion loss is  $.05 \times \sqrt{F}$  (GHz), and 50 ohms impedance is maintained over the adjustment range. The 5998 incorporates a positive locking mechanism for calibration accuracy.

# Adapters SMA

## 5016CCSF

SMA male to 2.4 mm female adapter  
frequency: DC-24.0 GHz

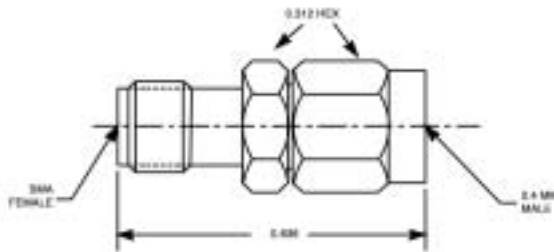


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5016CCSF	1.12:1

Center conductor is captivated.  
Standard finish is passivated.

## 5014CCSF

SMA female to 2.4 mm male adapter  
frequency: DC-24.0 GHz

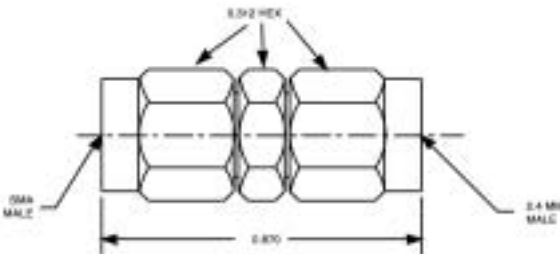


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5014CCSF	1.12:1

Center conductor is captivated.  
Standard finish is passivated.

## 5015CCSF

SMA male to 2.4 mm male adapter frequency:  
DC-24.0 GHz

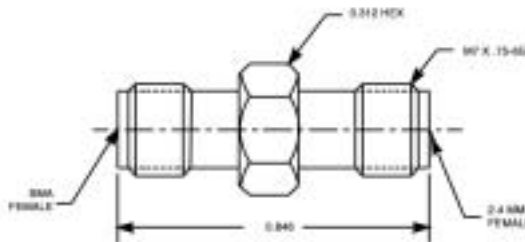


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5015CCSF	1.12:1

Center conductor is captivated.  
Standard finish is passivated.

## 5017CCSF

SMA female to 2.4 mm female adapter frequency:  
DC-24.0 GHz



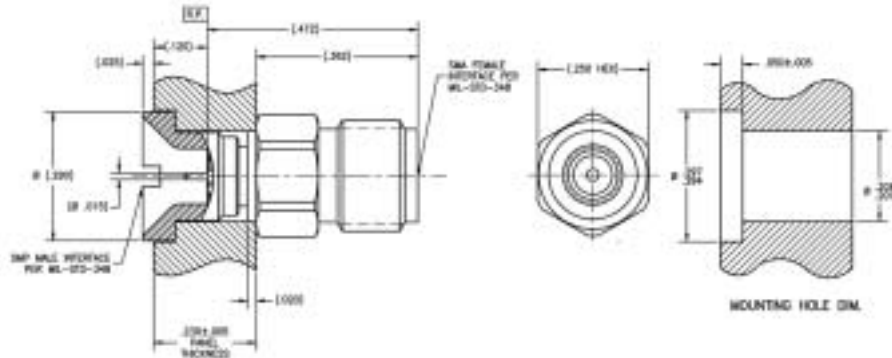
Tensolite Part Number	Max. VSWR DC - 18.0 GHz
5017CCSF	1.12:1

Center conductor is captivated.  
Standard finish is passivated.

# Adapters SMP

## P802-1CC

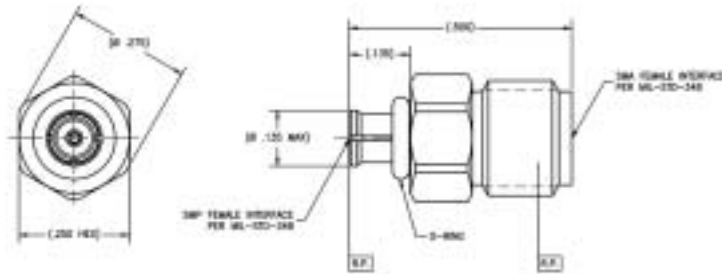
SMP male (catcher's mitt) to SMA female straight adapter



Center conductor is captivated.  
Standard units are gold finish.

## P819-1CC

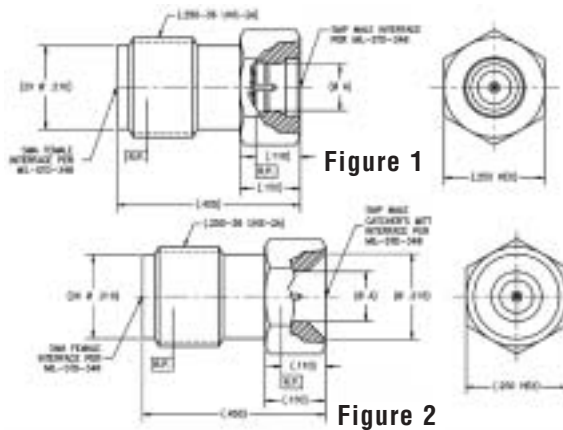
SMP female to SMA female straight adapter



Center conductor is captivated.  
Standard units are gold finish.

## P823

SMP male to SMA female straight adapter

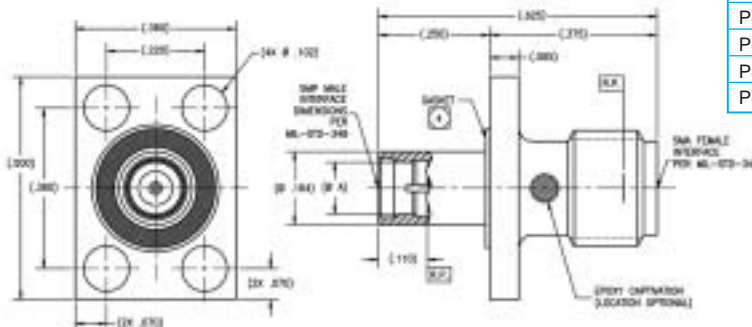


Tensolite Part No.	(ØA)	Interface	Fig.
P823-1CC	.116	Full Detent	1
P823-2CC	.120	Limited Detent	1
P823-3CC	.125	Smooth Bore	1
P823-4CC	.125	Catcher's Mitt	2

Center conductor is captivated.  
Standard units are gold finish.

## P825

SMP male 4 hole flange mount to SMA female straight adapter (w/gasket)



Tensolite Part Number	(ØA)	Interface
P825-1CCSF	.116	Full Detent
P825-1CC	.116	Full Detent
P825-2CCSF	.120	Limited Detent
P825-2CC	.120	Limited Detent
P825-3CCSF	.125	Smooth Bore
P825-3CC	.125	Smooth Bore

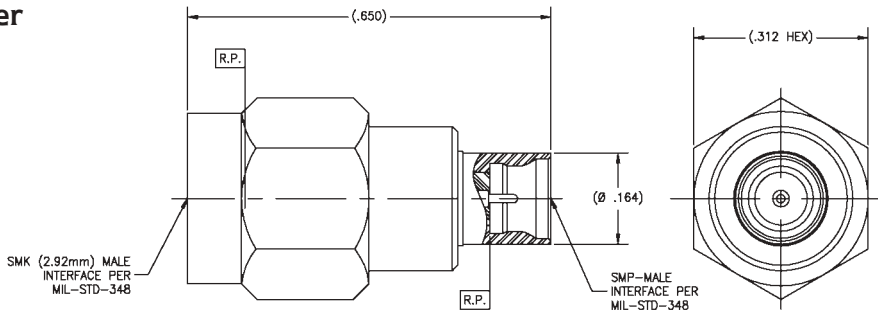
Center conductor is captivated.  
SF designates passivated finish.  
Standard units are gold finish.



# Adapters SMP

## P902

SMP male to SMK (2.92 mm) male straight adapter

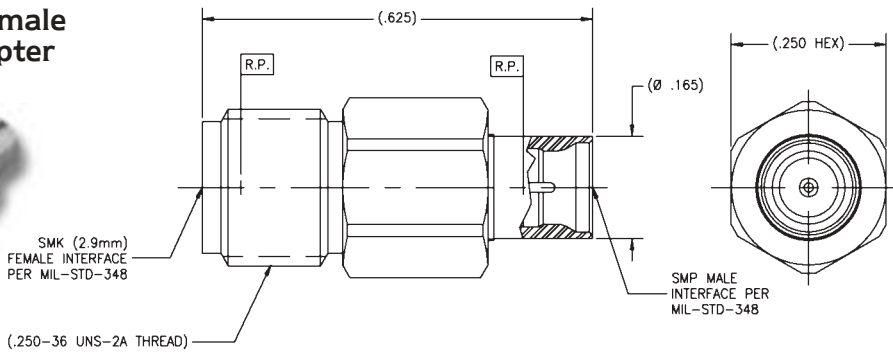


Tensolite Part Number	Interface
P902-1CCSF	Limited Detent
P902-2CCSF	Smooth Bore
P902-3CCSF	Full Detent

Center conductor is captivated.  
Standard finish is passivated.

## P903

SMP male to SMK (2.92mm) female straight adapter

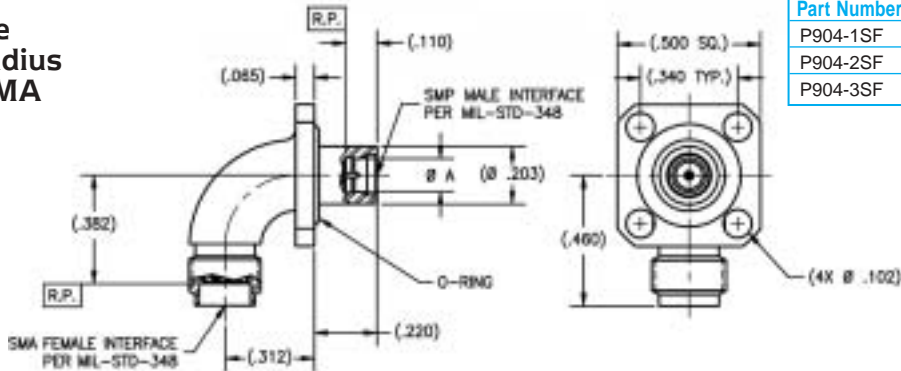


Tensolite Part Number	Interface
P903-1CCSF	Limited Detent
P903-2CCSF	Smooth Bore
P903-3CCSF	Full Detent

Center conductor is captivated.  
Standard finish is passivated.

## P904

SMP male 4 hole flange mount right angle to SMA female adapter

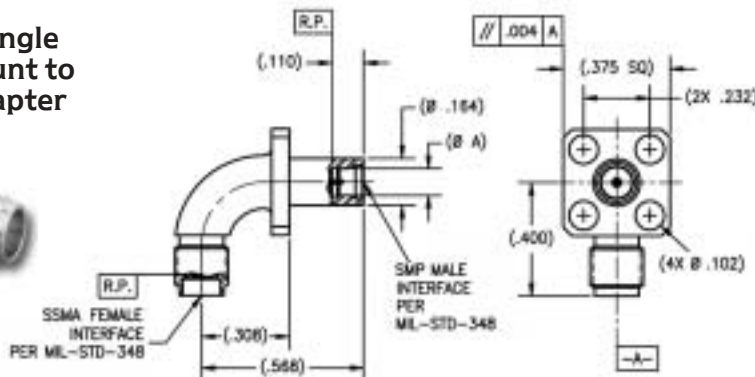


Tensolite Part Number	(ØA)	Interface
P904-1SF	(.116)	Full Detent
P904-2SF	(.120)	Limited Detent
P904-3SF	(.125)	Smooth Bore

Standard finish is passivated.

## P905

SMP male right angle 4 hole flange mount to SSMA female adapter



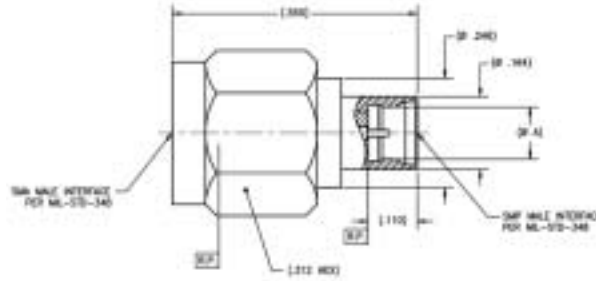
Tensolite Part Number	(ØA)	Interface
P905-1SF	(.116)	Full Detent
P905-2SF	(.120)	Limited Detent
P905-3SF	(.125)	Smooth Bore

Standard finish is passivated.

# Adapters SMP

## P906

SMP male to SMA male straight adapter

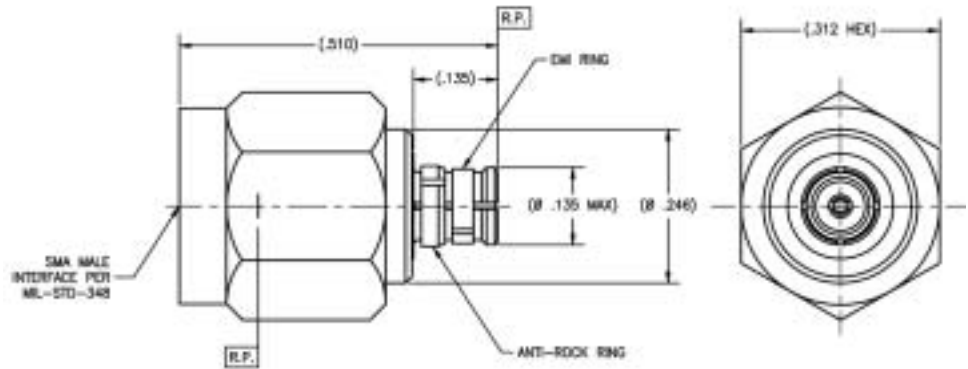


Tensolite Part Number	(ØA)	Interface
P906-1CCSF	(.120)	Limited Detent
P906-2CCSF	(.125)	Smooth Bore
P906-3CCSF	(.116)	Full Detent

Center conductor is captivated.  
Standard finish is passivated.

## P907-1CCSF

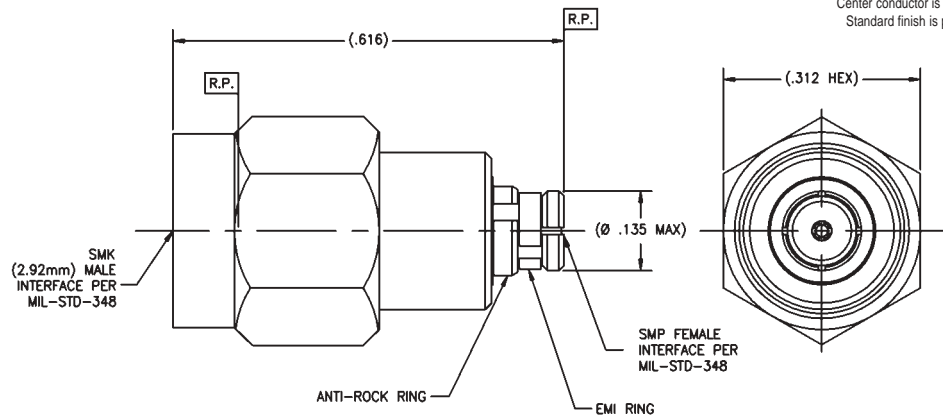
SMP female to SMA male straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## P908-1CCSF

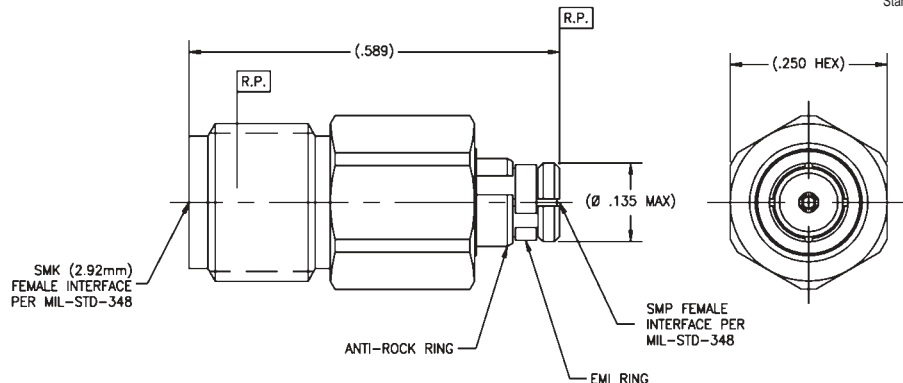
SMP female to SMK (2.92mm) male straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## P909-1CCSF

SMP female to SMK (2.92mm) female straight adapter

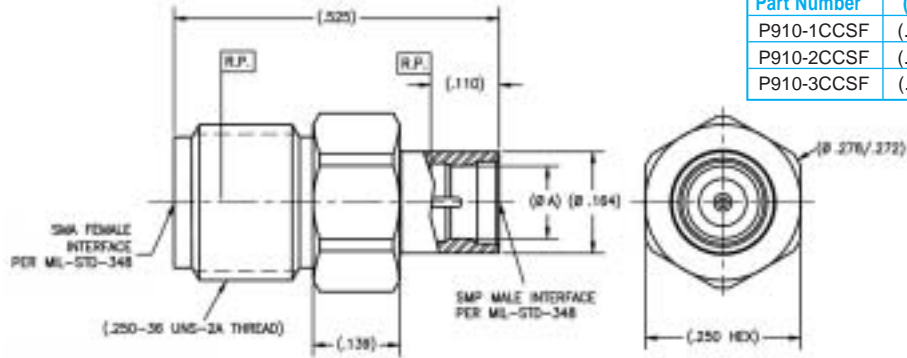


Center conductor is captivated.  
Standard finish is passivated.

# Adapters SMP

## P910

SMP male to SMA female straight adapter

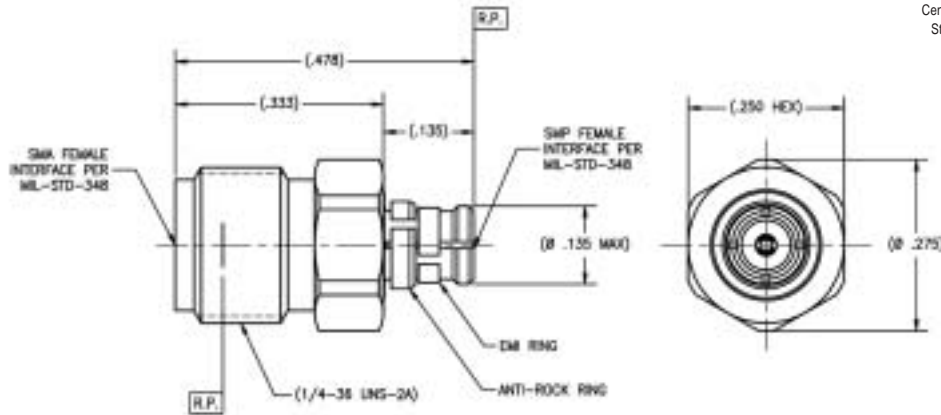


Tensolite Part Number	(ØA)	Interface
P910-1CCSF	(.120)	Limited Detent
P910-2CCSF	(.125)	Smooth Bore
P910-3CCSF	(.116)	Full Detent

Center conductor is captivated.  
Standard finish is passivated.

## P911-1CCSF

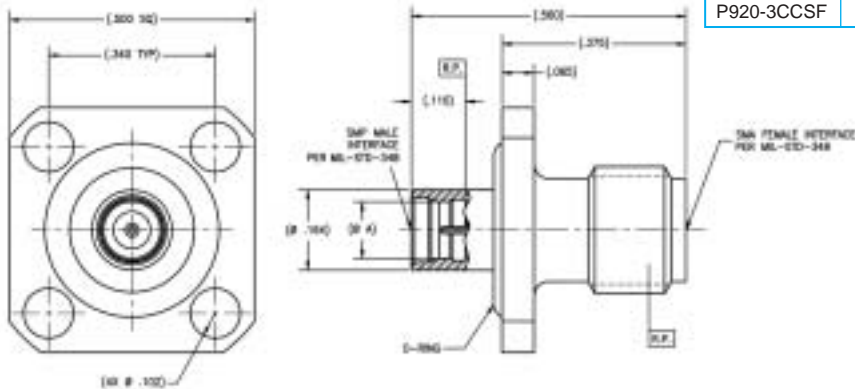
SMP female to SMA female straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## P920

SMP male 4 hole flange mount to SMA female straight adapter (w/O-ring)

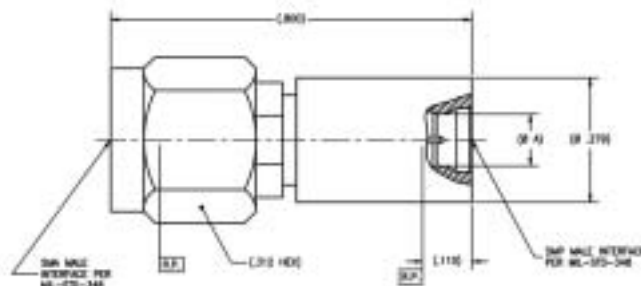


Tensolite Part Number	(ØA)	Interface
P920-1CCSF	(.116)	Full Detent
P920-2CCSF	(.120)	Limited Detent
P920-3CCSF	(.125)	Smooth Bore

Center conductor is captivated.  
Standard finish is passivated.

## P913

SMA male straight to SMP male adapter



Tensolite Part No.	Interface	"ØA"
P913-1CCSF	Full detent	.116
P913-2CCSF	Limited detent	.120
P913-3CCSF	Smooth bore	.125

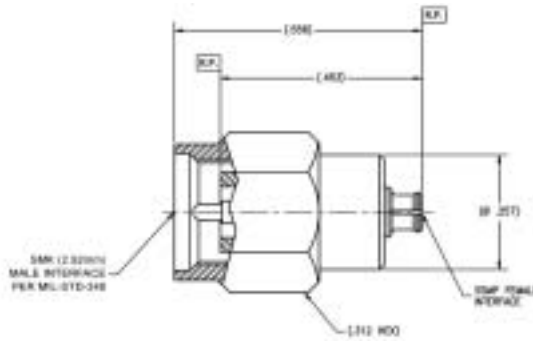
Center conductor is captivated.  
Standard finish is passivated.

# Adapters SSMP

SSMP Adapters

## PI23-1CCSF

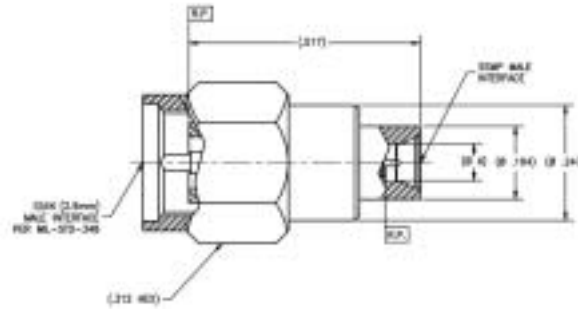
SSMP female SMK (2.92mm) male straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## PI24

SSMP male SMK (2.92MM) male straight adapter

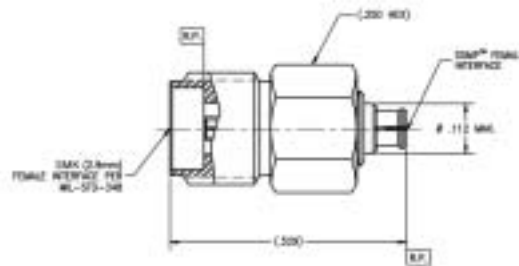


Tensolite Part Number	(ØA)	Interface
P124-1CCSF	(.085)	Full Detent
P124-2CCSF	(.088)	Non-Detent

Center conductor is captivated.  
Standard finish is passivated.

## PI25-1CCSF

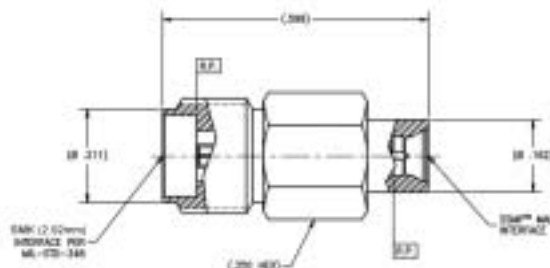
SSMP female to SMK (2.92mm) female straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## PI26

SSMP male to SMK (2.92mm) female straight adapter



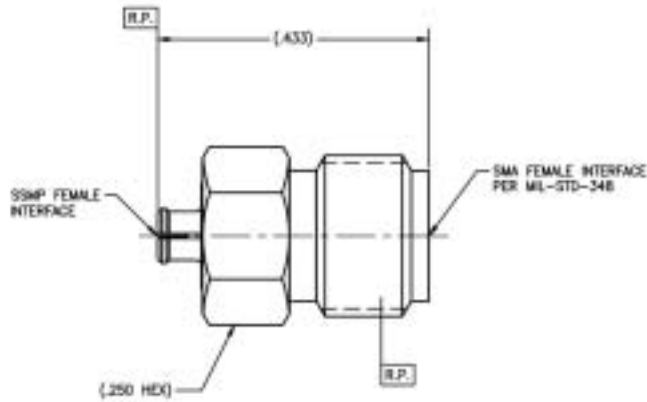
Tensolite Part Number	Interface
P126-1CCSF	Detent
P126-2CCSF	Non-detent

Center conductor is captivated.  
Standard finish is passivated.

# Adapters SSMP

## PI27-1CCSF

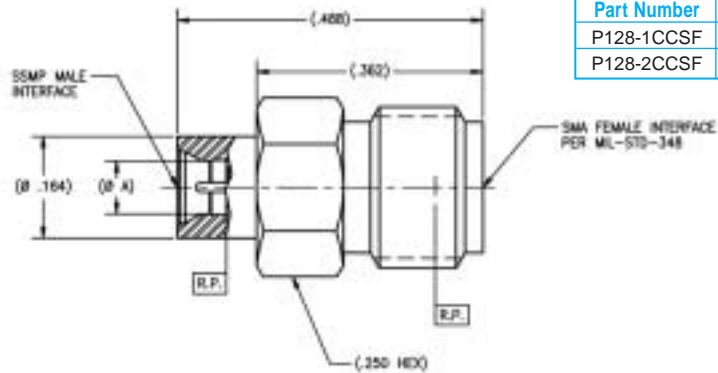
SSMP female to SMA female straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## PI28

SSMP male to SMA female straight adapter

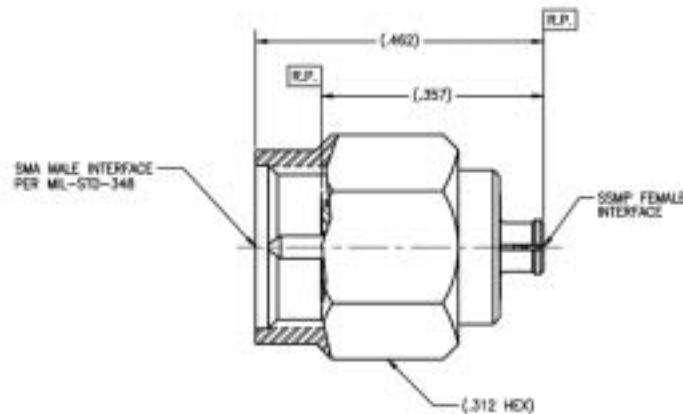


Tensolite Part Number	(ØA)	Interface
P128-1CCSF	(.085)	Detent
P128-2CCSF	(.088)	Non-detent

Center conductor is captivated.  
Standard finish is passivated.

## PI29-1CCSF

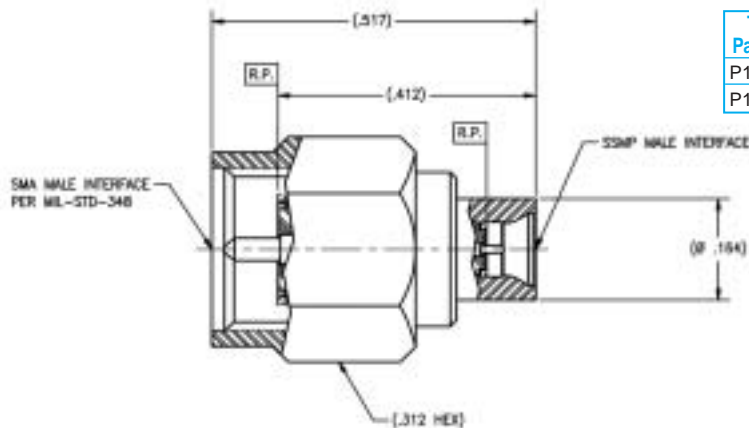
SSMP female to SMA male straight adapter



Center conductor is captivated.  
Standard finish is passivated.

## PI30

SSMP male to SMA male straight adapter



Tensolite Part Number	Interface
P130-1CCSF	Detent
P130-2CCSF	Non-detent

Center conductor is captivated.  
Standard finish is passivated.

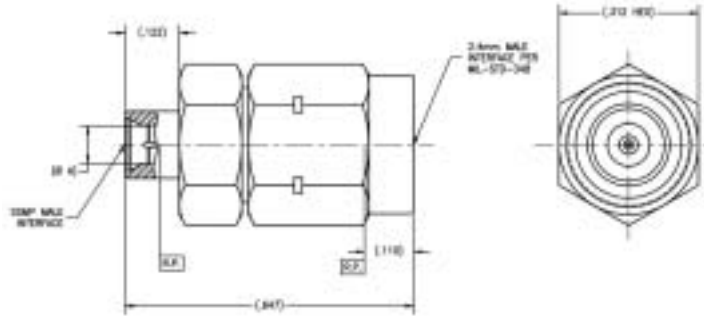


# Adapters SSMP

SSMP Adapters

## P139

SSMP male to 2.4mm male straight adapter

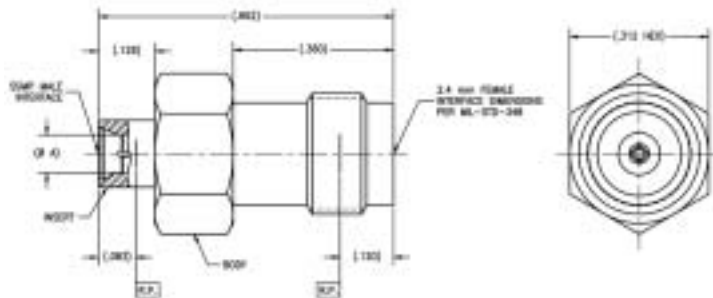


Tensolite Part Number	(ØA)	Interface
P139-1CC	.085	Detent
P139-1CCSF	.085	Detent
P139-2CC	.085	Smooth Bore
P139-2CCSF	.085	Smooth Bore

SF designates passivated finish.  
Standard units are gold finish.

## P141

SSMP male to 2.4 mm female straight adapter



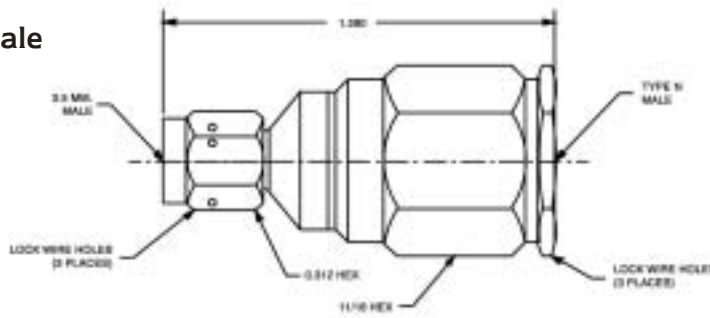
Tensolite Part Number	(ØA)	Interface
P141-1CC	.085	Detent
P141-1CCSF	.085	Detent
P141-2CC	.088	Non-detent
P141-2CCSF	.088	Non-detent

SF designates passivated finish.  
Standard units are gold finish.

# Adapters Type N Between Series - 3.5 mm, SMA, TNC

## 5029CCSF

N male to 3.5 mm male adapter

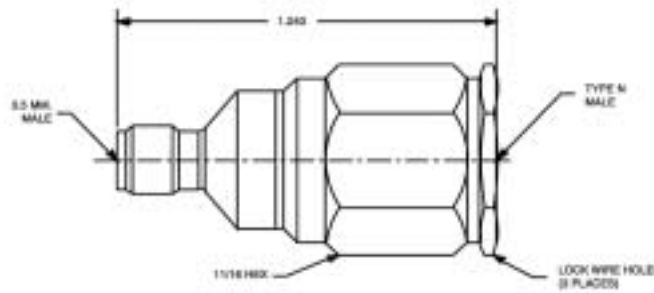


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5029CCSF	1.08 + .007 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5030CCSF

N male to 3.5 mm female adapter

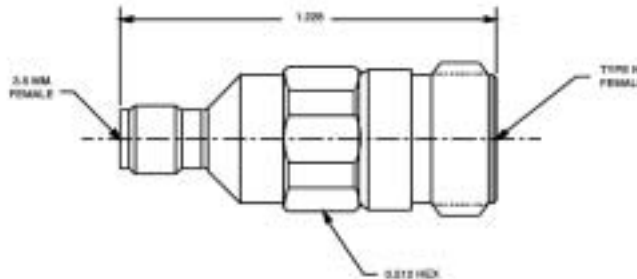


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5030CCSF	1.08 + .007 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5027CCSF

N female to 3.5 mm female adapter

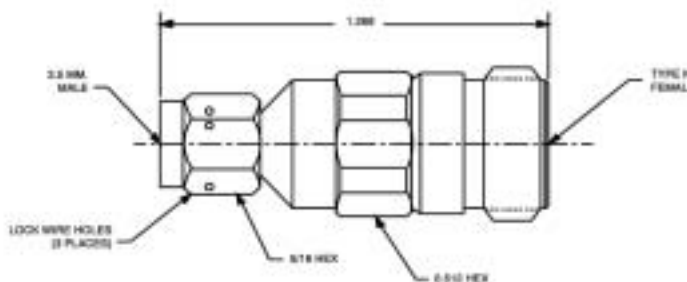


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5027CCSF	1.08 + .007 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5028CCSF

N female to 3.5 mm male adapter



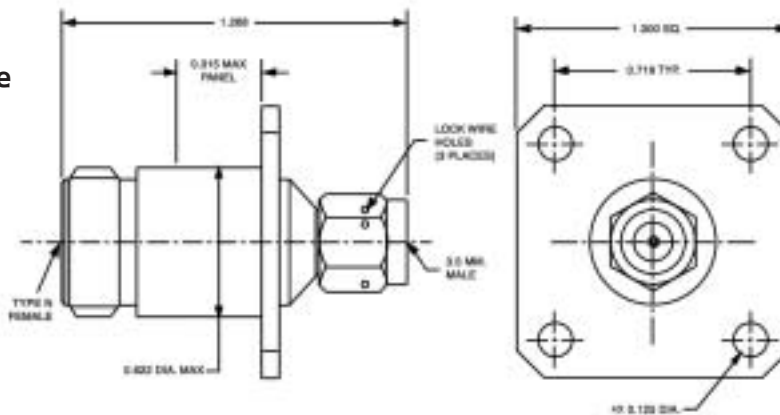
Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5028CCSF	1.08 + .007 fGHz

Center conductor is captivated.  
Standard finish is passivated.

# Adapters Type N Between Series - 3.5 mm, SMA, TNC

## 5039CCSF

N female to 3.5 mm male adapter, flange mount

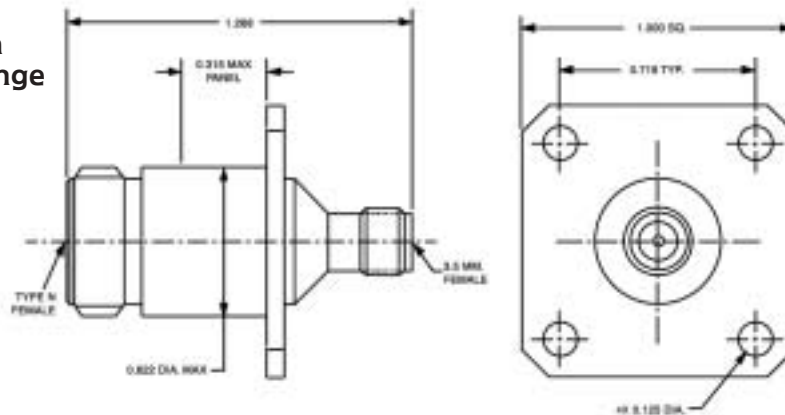


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5039CCSF	1.08 + .007 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5040CCSF

N female to 3.5 mm female adapter, flange mount

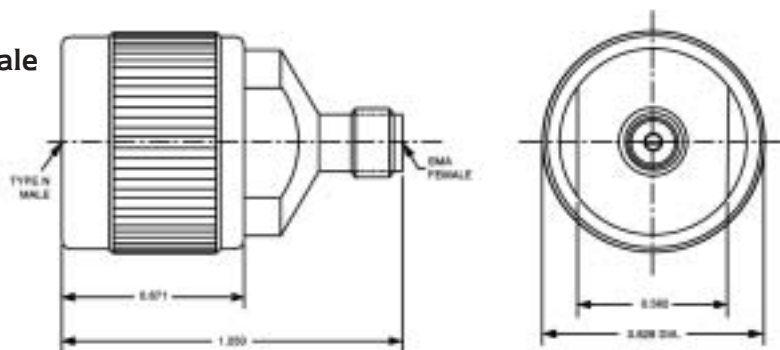


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5040CCSF	1.08 + .007 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5004CCSF

N male to SMA female adapter

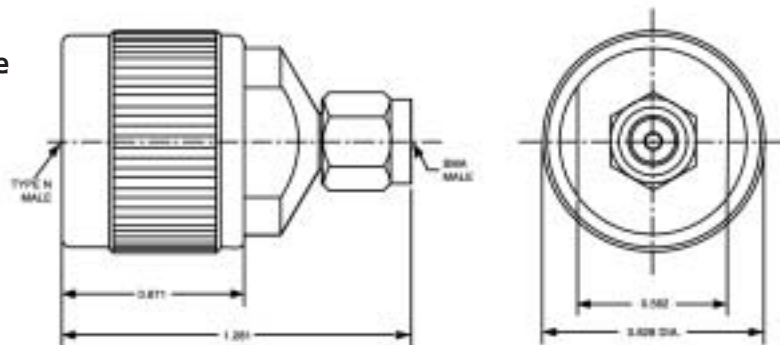


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5004CCSF	1.06 + .005 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5006CCSF

N male to SMA male adapter



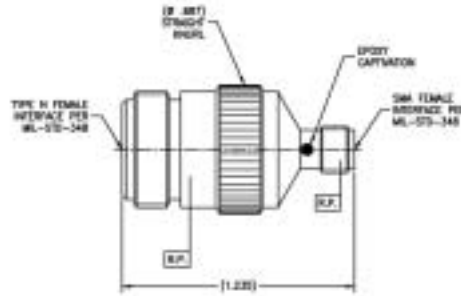
Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5006CCSF	1.06 + .005 fGHz

Center conductor is captivated.  
Standard finish is passivated.

# Adapters Type N Between Series - 3.5 mm, SMA, TNC

## 5008CCSF

N female to SMA female adapter

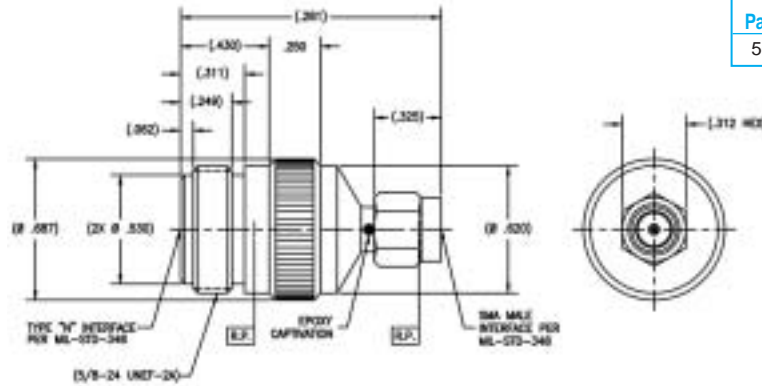


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5008CCSF	1.06 + .005 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5010CCSF

N female to SMA male adapter

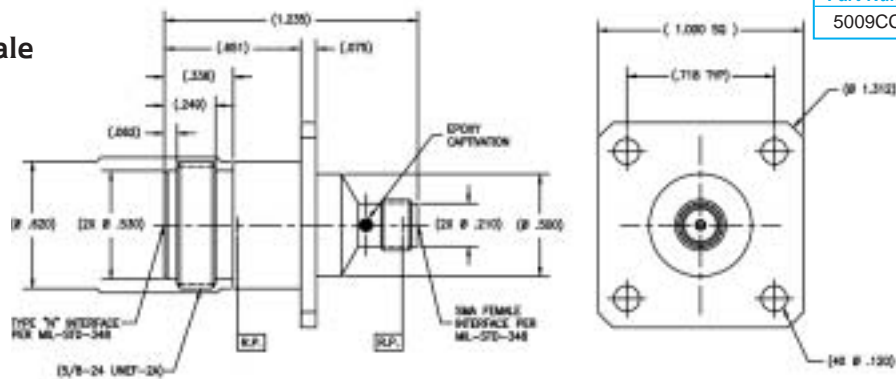


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5010CCSF	1.06 + .005 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5009CCSF

Flange mount N female to SMA female

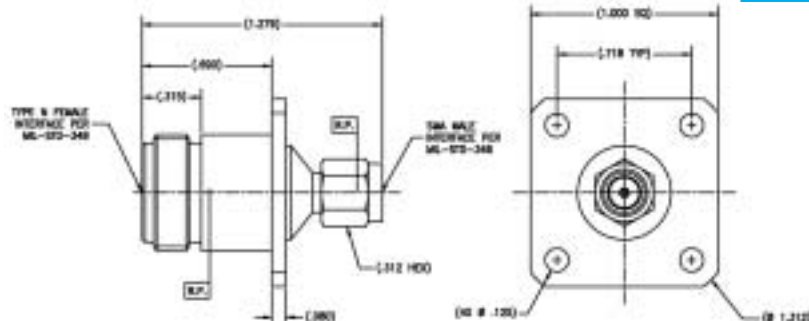


Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5009CCSF	1.06 + .005 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5012CCSF

Flange mount N female to SMA male



Tensolite Part Number	Max. VSWR DC-18.0 fGHz
5012CCSF	1.06 + .005 fGHz

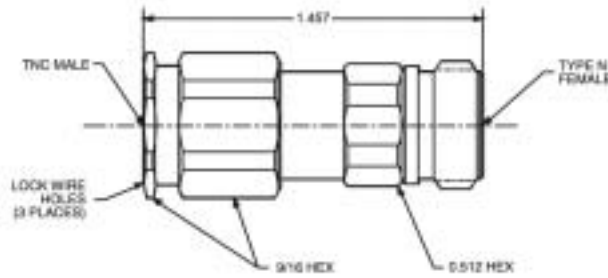
Center conductor is captivated.  
Standard finish is passivated.

Type N Between Series Adapters

# Adapters Type N Between Series - 3.5 mm, SMA, TNC

## 5013CCSF

TNC male to type N female adapter

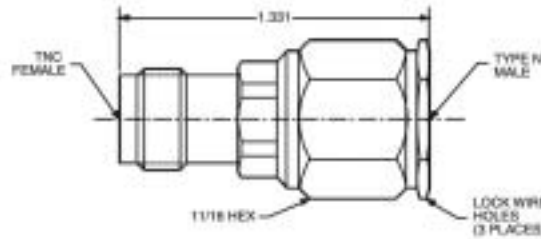


Tensolite Part Number	Max. VSWR DC-18.0 GHz
5013CCSF	1.09 + .008 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5034CCSF

TNC female to type N male adapter

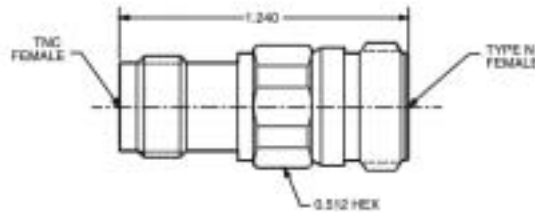


Tensolite Part Number	Max. VSWR DC-18.0 GHz
5034CCSF	1.09 + .008 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5035CCSF

TNC female to type N female adapter

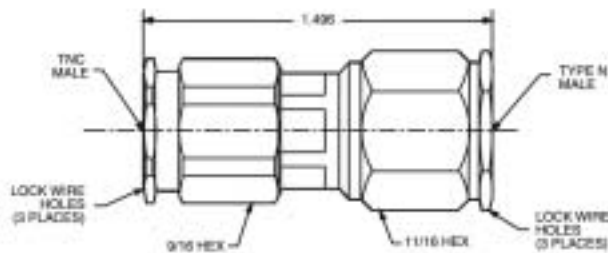


Tensolite Part Number	Max. VSWR DC-18.0 GHz
5035CCSF	1.09 + .008 fGHz

Center conductor is captivated.  
Standard finish is passivated.

## 5033CCSF

N male to TNC male adapter



Tensolite Part Number	Max. VSWR DC-18.0 GHz
5033CCSF	1.09 + .008 fGHz

Center conductor is captivated.  
Standard finish is passivated.

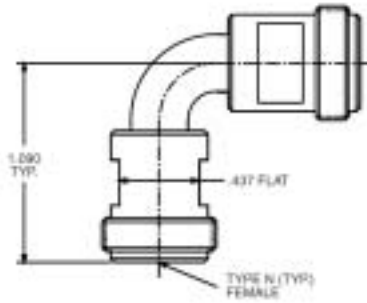




# Adapters Type N In-Series Adapters

## 8029CCSF

Right Angle, FE/FE  
In-Series Adapter

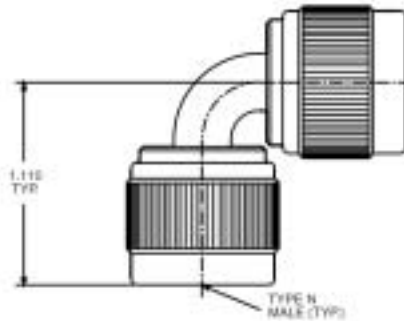


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
8029CCSF	1.20:1

Center conductor is captivated.  
Standard finish is passivated.

## 8028CCSF

Right Angle, MA/MA  
In-Series Adapter

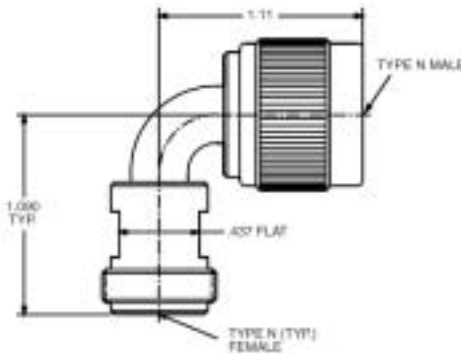


Tensolite Part Number	Max. VSWR DC - 18.0 GHz
8028CCSF	1.20:1

Center conductor is captivated.  
Standard finish is passivated.

## 8030CCSF

Right Angle,  
MA/FE In-Series  
Adapter



Tensolite Part Number	Max. VSWR DC - 18.0 GHz
8030CCSF	1.20:1

Center conductor is captivated.  
Standard finish is passivated.



QBC Quality Blind Mate Connectors

# QBC Quality Blind Mate Connectors

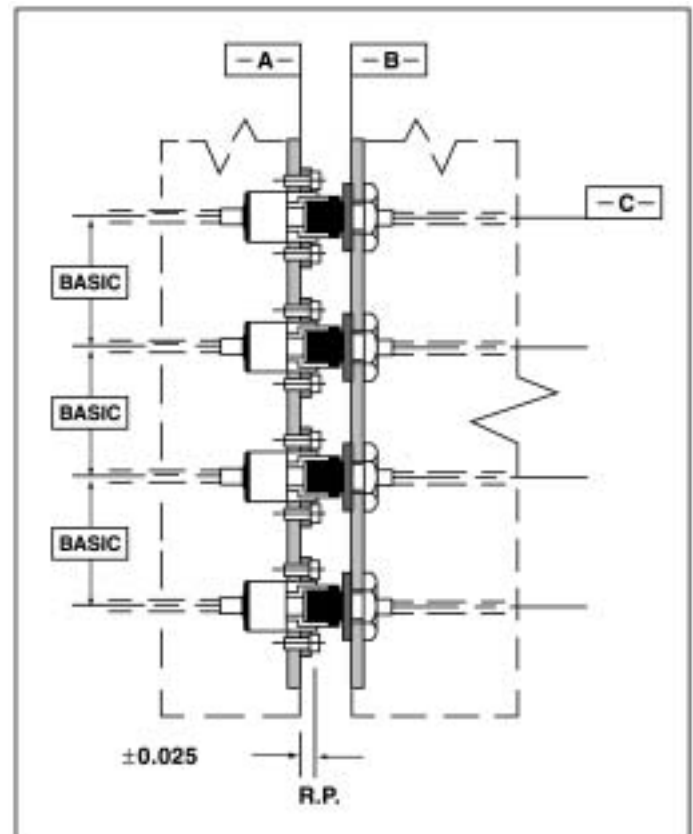
Tensolite's QBC™ product line is a Connector Series providing blind mate solutions for Industry Standard Connectors.

The QBC Quality Blind Mate Connector is an independently mountable, self aligning, radial capture, coaxial cable termination, matable directly to Mil-Std-348A coaxial connectors.

SMA, SMB, SMC, Type N, Type F, BNC and TNC are all compatible with Tensolite's QBC™ System.

Consistent with Mil-Std-348A series applications, the QBC™ is a uniquely designed blind mate interface solution. Providing a low-cost and "ease-of-use" solution, the QBC™ system allows for .025" radial misalignments and .060" axial displacement.

Tensolite's QBC™ Series is ideal for use in both end product and production test applications. Tensolite offers the QBC™ in

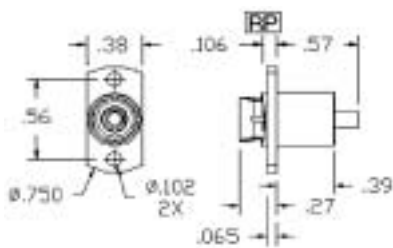


two mounting configurations and is available in both 50- and 75-Ohm interfaces.

Structural stiffness of mating arrays -A- and -B- must support QBC reference plane relationship. Each termination location exerts a longitudinal force of less than 4.0 lbs. between arrays -A- and -B-. Mating arrays -A- and -B- have matched basic mounting hole locations for terminations. Tolerances suggest preferred flange to reference plane relationship within a group of front flange mounts. All termination mounting features are positioned Basic to users datum's.

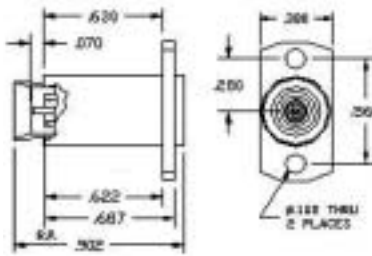
## Tested Interconnect Frequencies

QBC-SMA	@	18 Ghz
QBC-SMB	@	4 Ghz
QBC-SMC	@	10 Ghz
QBC-Type N	@	12 Ghz
QBC-Type F	@	3 Ghz
QBC-BNC	@	4 Ghz
QBC-TNC	@	12 Ghz



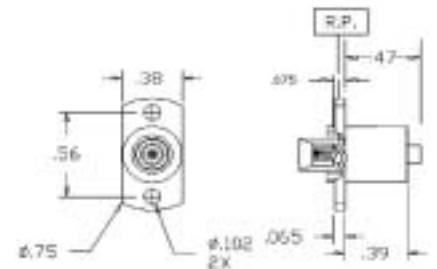
**Connector Selection Code 63**  
**SMA Plug QBC** – 50 OHM

Item	Materials	Finishes
Housing	303 Stainless	Passivate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



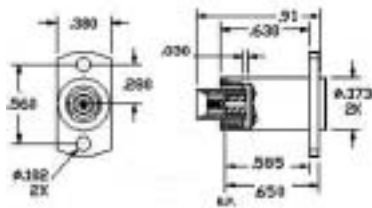
**Connector Selection Code 64**  
**SMA Reverse Flange QBC** – 50 OHM

Item	Materials	Finishes
Housing	Brass	Nickel Plate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



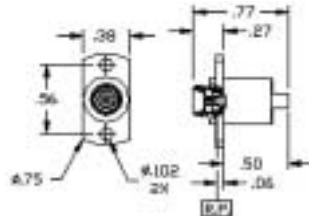
**Connector Selection Code B1**  
**SMB Plug QBC** – 50 OHM

Item	Materials	Finishes
Housing	303 Stainless	Passivate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



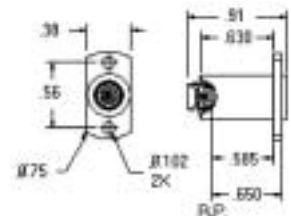
**Connector Selection Code B5**  
**SMB Reverse Flange QBC** – 50 OHM

Item	Materials	Finishes
Housing	Brass	Nickel Plate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



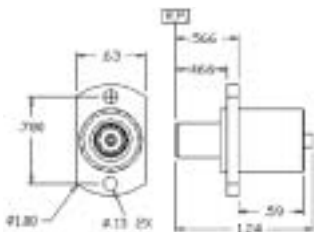
**Connector Selection Code J0**  
**SMC Plug QBC** – 50 OHM

Item	Materials	Finishes
Housing	303 Stainless	Passivate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



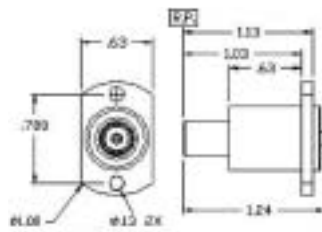
**Connector Selection Code J4**  
**SMC Reverse Flange QBC** – 50 OHM

Item	Materials	Finishes
Housing	Brass	Nickel Plate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



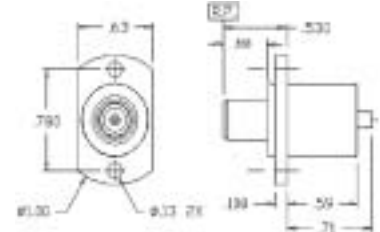
**Connector Selection Code E1**  
**Type N Plug QBC** – 50 OHM

Item	Materials	Finishes
Housing	303 Stainless	Passivate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



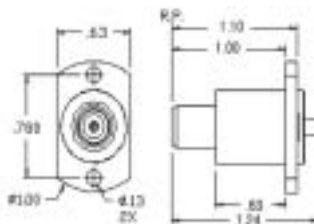
**Connector Selection Code E3**  
**Type N Reverse flange QBC** – 50 OHM

Item	Materials	Finishes
Housing	Brass	Nickel Plate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



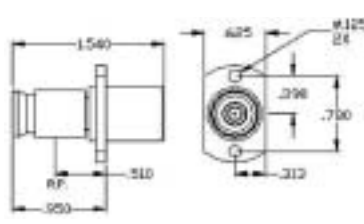
**Connector Selection Code F1**  
**BNC/TNC Plug QBC** – 50 OHM

Item	Materials	Finishes
Housing	303 Stainless	Passivate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



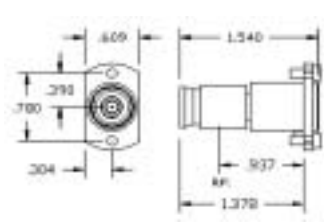
**Connector Selection Code F3**  
**BNC/TNC Reverse flange QBC** – 50 OHM

Item	Materials	Finishes
Housing	Brass	Nickel Plate
Shell	Brass	Gold Plate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



**Connector Selection Code L2**  
**Type F Plug QBC** – 75 OHM

Item	Materials	Finishes
Housing	Brass	Gold Plate
Shell	303 Stainless	Passivate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate



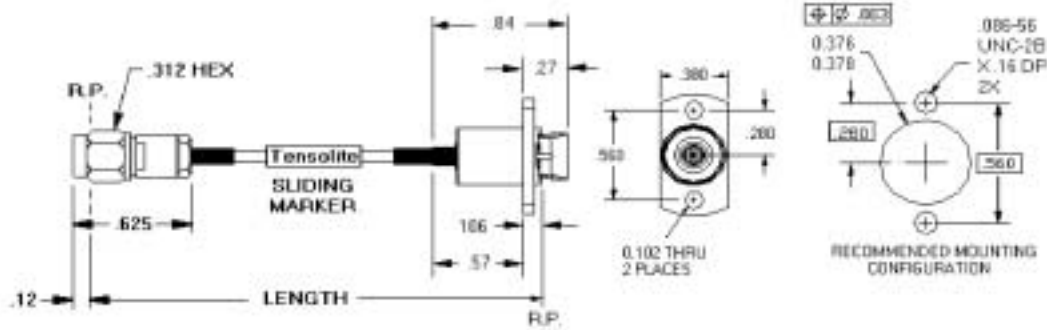
**Connector Selection Code L1**  
**Type F Reverse Flange QBC** – 75 OHM

Item	Materials	Finishes
Housing	Brass	Gold Plate
Shell	303 Stainless	Passivate
Insulator	PTFE	None
Contact	Copper Beryllium	Gold Plate

QBC Quality Blind Mate Connectors

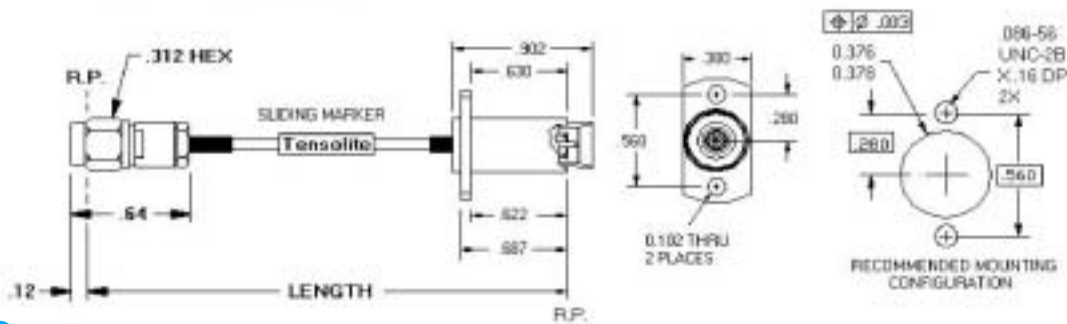


**SMA MALE TO QBC SMA PLUG  
ON 561 Q-FLEX® PLUS CABLE.**



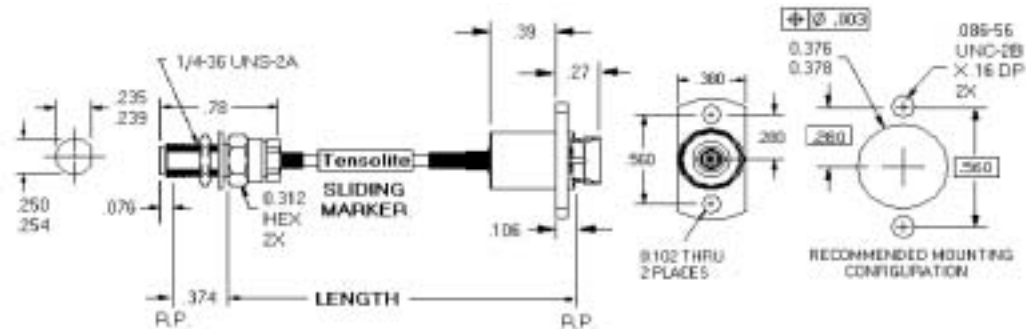
PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES
1-3863-561-3208	S	8.0	0.25 0.4
1-3863-561-3212	S	12.0	0.25 0.5
1-3863-561-3218	S	18.0	0.25 0.6
1-3863-561-3224	S	24.0	0.25 0.7
1-3863-561-3230	S	30.0	0.30 0.8
1-3863-561-3236	S	36.0	0.36 0.9
1-3863-561-3248	S	48.0	0.48 1.2
1-3863-561-3260	S	60.0	0.60 1.4
1-3863-561-3272	S	72.0	0.72 1.7
1-3863-561-3284	S	84.0	0.84 1.9

**SMA MALE TO QBC SMA REVERSE FLANGE  
ON 561 Q-FLEX® PLUS CABLE.**



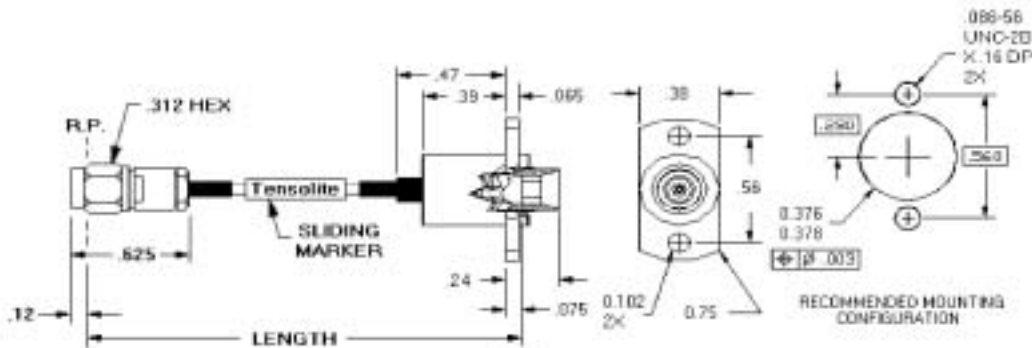
PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES
1-3864-561-3208	S	8.0	0.25 0.4
1-3864-561-3212	S	12.0	0.25 0.5
1-3864-561-3218	S	18.0	0.25 0.6
1-3864-561-3224	S	24.0	0.25 0.7
1-3864-561-3230	S	30.0	0.30 0.8
1-3864-561-3236	S	36.0	0.36 0.9
1-3864-561-3248	S	48.0	0.48 1.2
1-3864-561-3260	S	60.0	0.60 1.4
1-3864-561-3272	S	72.0	0.72 1.7
1-3864-561-3284	S	84.0	0.84 1.9

**SMA FEMALE BULKHEAD TO QBC SMA PLUG  
ON 561 Q-FLEX® PLUS CABLE.**



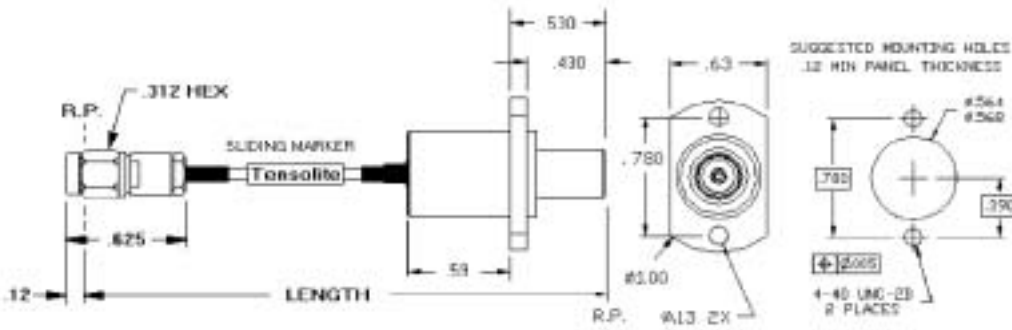
PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES
1-4063-561-3208	S	8.0	0.25 0.4
1-4063-561-3212	S	12.0	0.25 0.5
1-4063-561-3218	S	18.0	0.25 0.6
1-4063-561-3224	S	24.0	0.25 0.7
1-4063-561-3230	S	30.0	0.30 0.8
1-4063-561-3236	S	36.0	0.36 0.9
1-4063-561-3248	S	48.0	0.48 1.2
1-4063-561-3260	S	60.0	0.60 1.4
1-4063-561-3272	S	72.0	0.72 1.7
1-4063-561-3284	S	84.0	0.84 1.9

**SMA MALE TO QBC SMB PLUG  
ON 561 Q-FLEX® PLUS CABLE.**



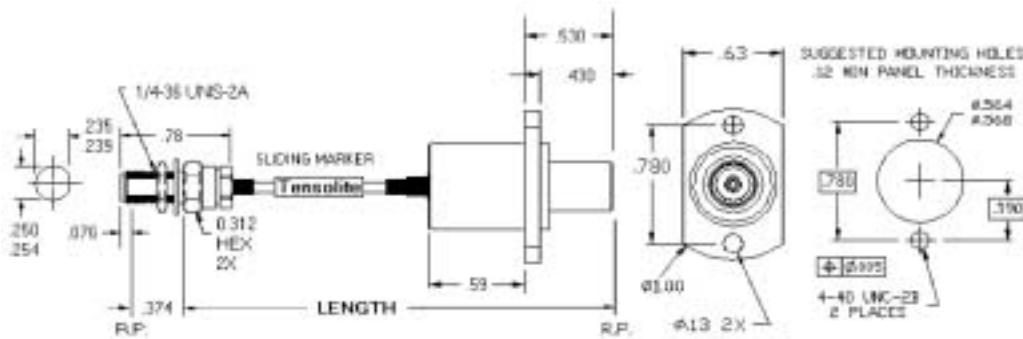
PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES
1-3851-561-3208	S	8.0	0.25 0.4
1-3851-561-3212	S	12.0	0.25 0.5
1-3851-561-3218	S	18.0	0.25 0.6
1-3851-561-3224	S	24.0	0.25 0.7
1-3851-561-3230	S	30.0	0.30 0.8
1-3851-561-3236	S	36.0	0.36 0.9
1-3851-561-3248	S	48.0	0.48 1.2
1-3851-561-3260	S	60.0	0.60 1.4
1-3851-561-3272	S	72.0	0.72 1.7
1-3851-561-3284	S	84.0	0.84 1.9

**SMA MALE TO QBC BNC / TNC PLUG ON 561 Q-FLEX® PLUS CABLE.**



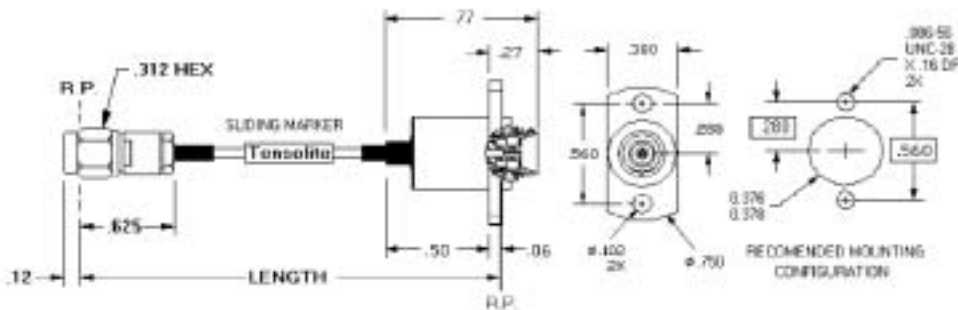
PART NUMBER	LENGTH INCHES	+/- LENGTH	WEIGHT OUNCES	
1-36F1-561-3208	8	8.0	0.25	0.4
1-36F1-561-3212	8	12.0	0.25	0.5
1-36F1-561-3218	8	18.0	0.25	0.6
1-36F1-561-3224	8	24.0	0.25	0.7
1-36F1-561-3230	8	30.0	0.30	0.8
1-36F1-561-3236	8	36.0	0.36	0.9
1-36F1-561-3248	8	48.0	0.48	1.2
1-36F1-561-3260	8	60.0	0.60	1.4
1-36F1-561-3272	8	72.0	0.72	1.7
1-36F1-561-3284	8	84.0	0.84	1.9

**SMA FEMALE BULKHEAD TO QBC BNC / TNC PLUG ON 561 Q-FLEX® PLUS CABLE.**



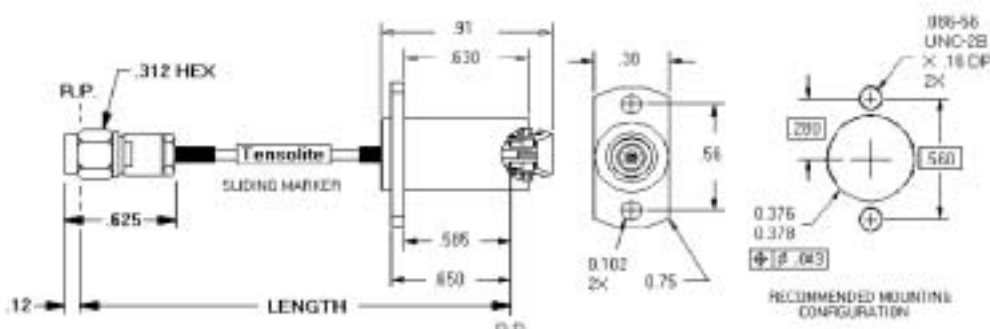
PART NUMBER	LENGTH INCHES	+/- LENGTH	WEIGHT OUNCES	
1-40F1-561-3208	8	8.0	0.25	0.4
1-40F1-561-3212	8	12.0	0.25	0.5
1-40F1-561-3218	8	18.0	0.25	0.6
1-40F1-561-3224	8	24.0	0.25	0.7
1-40F1-561-3230	8	30.0	0.30	0.8
1-40F1-561-3236	8	36.0	0.36	0.9
1-40F1-561-3248	8	48.0	0.48	1.2
1-40F1-561-3260	8	60.0	0.60	1.4
1-40F1-561-3272	8	72.0	0.72	1.7
1-40F1-561-3284	8	84.0	0.84	1.9

**SMA MALE TO QBC SMC PLUG ON 561 Q-FLEX® PLUS CABLE.**



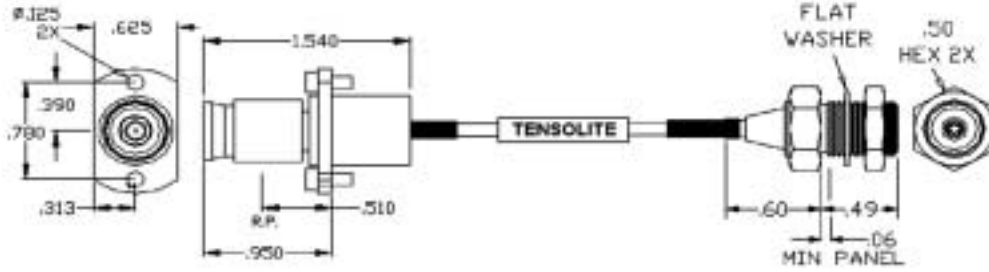
PART NUMBER	LENGTH INCHES	+/- LENGTH	WEIGHT OUNCES	
1-36J0-561-3208	8	8.0	0.25	0.4
1-36J0-561-3212	8	12.0	0.25	0.5
1-36J0-561-3218	8	18.0	0.25	0.6
1-36J0-561-3224	8	24.0	0.25	0.7
1-36J0-561-3230	8	30.0	0.30	0.8
1-36J0-561-3236	8	36.0	0.36	0.9
1-36J0-561-3248	8	48.0	0.48	1.2
1-36J0-561-3260	8	60.0	0.60	1.4
1-36J0-561-3272	8	72.0	0.72	1.7
1-36J0-561-3284	8	84.0	0.84	1.9

**SMA MALE TO QBC SMC REVERSE FLANGE PLUG ON 561 Q-FLEX® PLUS CABLE.**



PART NUMBER	LENGTH INCHES	+/- LENGTH	WEIGHT OUNCES	
1-36J4-561-3208	8	8.0	0.25	0.4
1-36J4-561-3212	8	12.0	0.25	0.5
1-36J4-561-3218	8	18.0	0.25	0.6
1-36J4-561-3224	8	24.0	0.25	0.7
1-36J4-561-3230	8	30.0	0.30	0.8
1-36J4-561-3236	8	36.0	0.36	0.9
1-36J4-561-3248	8	48.0	0.48	1.2
1-36J4-561-3260	8	60.0	0.60	1.4
1-36J4-561-3272	8	72.0	0.72	1.7
1-36J4-561-3284	8	84.0	0.84	1.9

**75 OHM QBC F MALE TO TYPE F B'HD ON  
837 Q-FLEX® PLUS CABLE.**



PART NUMBER	LENGTH INCHES	+ - LENGTH	WEIGHT OUNCES
1-FOL2-837-3208	S	8.0	0.25 0.6
1-FOL2-837-3212	S	12.0	0.25 0.7
1-FOL2-837-3218	S	18.0	0.25 0.9
1-FOL2-837-3224	S	24.0	0.25 1.0
1-FOL2-837-3230	S	30.0	0.25 1.2
1-FOL2-837-3236	S	36.0	0.25 1.3
1-FOL2-837-3248	S	48.0	0.25 1.6
1-FOL2-837-3260	S	60.0	0.25 1.9
1-FOL2-837-3272	S	72.0	0.25 2.2
1-FOL2-837-3284	S	84.0	0.25 2.5

**How to Order:**

Designate the desired assembly by choosing from the available cables and connectors from the matrix to the far right. Insert the codes at the appropriate location as noted in the example. **Connector codes should be listed in increasing numerical sequence.**

Contact Tensolite for cables and connectors not shown.

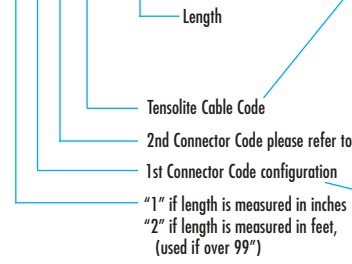
**ABBREVIATIONS**  
FEP .....Fluorinated ethylene propylene  
PUR .....Polyurethane

**HOW TO USE THIS GUIDE**

- 1 Choose your cable**
- 2 Choose your connectors**
- 3 Build your part number**
- 4 Call Tensolite: 800-362-3539  
Fax: 978-475-1583**

QBC Quality Blind Mate Connectors

**3 ALL OTHER ASSEMBLIES**  
X-XXXX-XXX-32 XX



**1**

Tensolite Cable Code	Description	Cable Diameter	Frequency Range	Jacket Material
561	Q-Flex Plus®	.115	18 & 26.5	PUR
837	Q-Flex Plus® 0hm	.115	18 & 26.5	PUR

**CONNECTOR CODES**

SERIES	BNC	TNC	TYPE N	SMA	TYPE F
Max Frequency in GHz4	4	18	18	26.5	3
<b>CONFIGURATION</b>					
Plug	24	30	18	36	-
Jack	-	-	-	-	-
Bulkhead Jack	-	-	-	40	FO

# RF Microwave Standard Assemblies





# Q-Flex® Series Specifications

Q-Flex® assemblies are a unique ALTERNATIVE to custom designed flexible coaxial cables. Traditionally custom specified, these cables are now available in various lengths and deliverable in 24 hours.

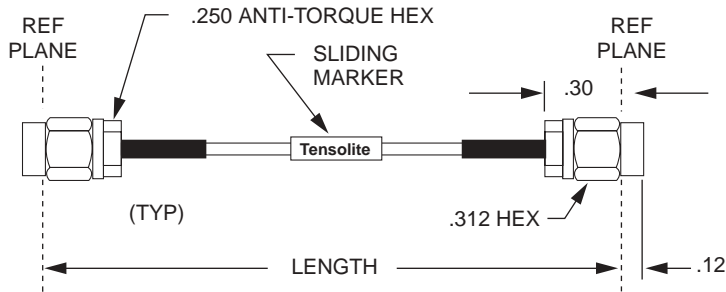
There is less than .05dB insertion loss with flexure, so your requirements for a stable cable are easily maintained.

Q-Flex® utilizes Tensolite's anti-torque SMA, SMP or a connector of your choice, thus extending the cable's useful life.

Assembly Cable Code	Bulk Cable P/N	OD
461	LLF-1087	.105"
794	HFF-1087	.105"
463	LLF-1141	.163"
465	LLF-1250	.270"

*Flexible Alternatives to RG 405, 402 and 401 with improved attenuation*

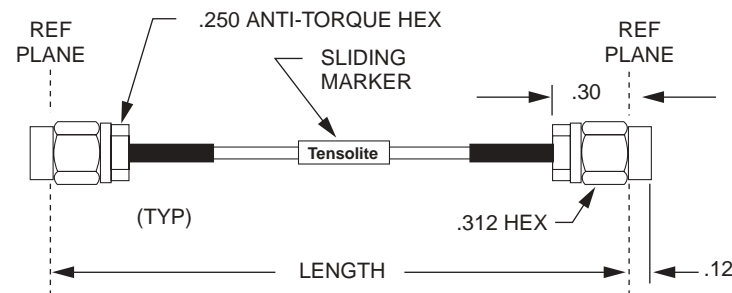
## 18 GHz SMA Male to SMA Male on 461 Q-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-461-5204	4.00	0.25	0.3
1-3636-461-5205	5.00	0.25	0.3
1-3636-461-5206	6.00	0.25	0.3
1-3636-461-5208	8.00	0.25	0.3
1-3636-461-5212	12.00	0.25	0.3
1-3636-461-5218	18.00	0.25	0.5
1-3636-461-5224	24.00	0.25	0.7
1-3636-461-5236	36.00	0.36	0.9
1-3636-461-5248	48.00	0.48	1.2

1-3636-461-52XX  
Your Length

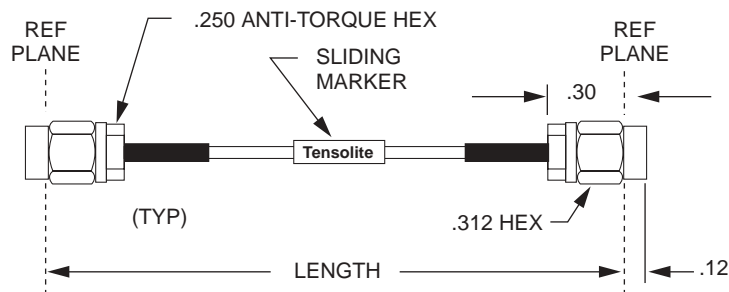
## 18 GHz SMA Male to SMA Male on 463 Q-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-463-5204	4.00	0.25	0.5
1-3636-463-5205	5.00	0.25	0.5
1-3636-463-5206	6.00	0.25	0.6
1-3636-463-5208	8.00	0.25	0.7
1-3636-463-5212	12.00	0.25	0.9
1-3636-463-5218	18.00	0.25	1.2
1-3636-463-5224	24.00	0.25	1.6
1-3636-463-5236	36.00	0.36	2.2
1-3636-463-5248	48.00	0.48	2.9

1-3636-463-52XX  
Your Length

## 18 GHz SMA Male to SMA Male on 465 Q-Flex® Cable



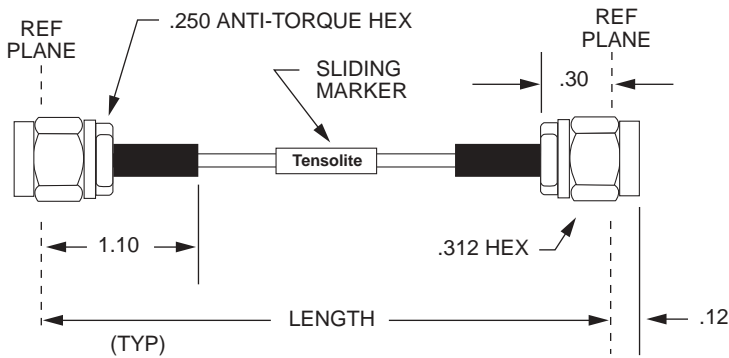
Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-465-5204	4.00	0.25	0.7
1-3636-465-5205	5.00	0.25	0.8
1-3636-465-5206	6.00	0.25	0.9
1-3636-465-5208	8.00	0.25	1.1
1-3636-465-5212	12.00	0.25	1.6
1-3636-465-5218	18.00	0.25	2.2
1-3636-465-5224	24.00	0.25	2.9
1-3636-465-5236	36.00	0.36	4.2
1-3636-465-5248	48.00	0.48	5.5

1-3636-465-52XX  
Your Length



# Q-Flex® Series Specifications

## 40 GHz smK Male to smK Male on 794 Q-Flex® Cable

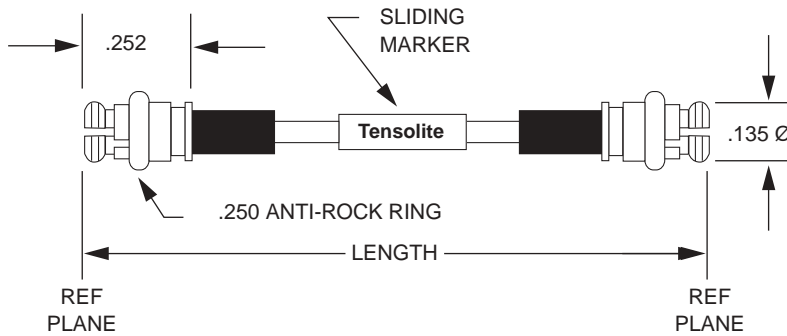


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-K6K6-794-5304	4.00	0.25	0.3
1-K6K6-794-5305	5.00	0.25	0.3
1-K6K6-794-5306	6.00	0.25	0.3
1-K6K6-794-5308	8.00	0.25	0.3
1-K6K6-794-5312	12.00	0.25	0.4
1-K6K6-794-5318	18.00	0.25	0.5
1-K6K6-794-5324	24.00	0.25	0.7
1-K6K6-794-5336	36.00	0.36	0.9
1-K6K6-794-5348	48.00	0.48	1.2

1-K6K6-794-53XX

Your Length

## 40 GHz SMP Plug to SMP Plug on 794 Q-Flex® Cable

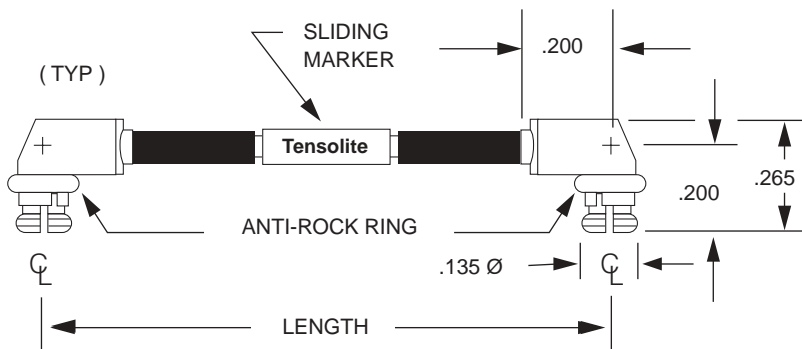


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-G6G6-794-3304	4.00	0.25	0.3
1-G6G6-794-3305	5.00	0.25	0.3
1-G6G6-794-3306	6.00	0.25	0.3
1-G6G6-794-3308	8.00	0.25	0.3
1-G6G6-794-3312	12.00	0.25	0.4
1-G6G6-794-3318	18.00	0.25	0.5
1-G6G6-794-3324	24.00	0.25	0.7
1-G6G6-794-3336	36.00	0.36	0.9
1-G6G6-794-3348	48.00	0.48	1.2

1-G6G6-794-33XX

Your Length

## 26 GHz SMP Right Angle Plug to SMP Right Angle Plug on 794 Q-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-G7G7-794-3304	4.00	0.25	0.3
1-G7G7-794-3305	5.00	0.25	0.3
1-G7G7-794-3306	6.00	0.25	0.3
1-G7G7-794-3308	8.00	0.25	0.3
1-G7G7-794-3312	12.00	0.25	0.4
1-G7G7-794-3318	18.00	0.25	0.5
1-G7G7-794-3324	24.00	0.25	0.7
1-G7G7-794-3336	36.00	0.36	0.9
1-G7G7-794-3348	48.00	0.48	1.2

1-G7G7-794-33XX

Your Length

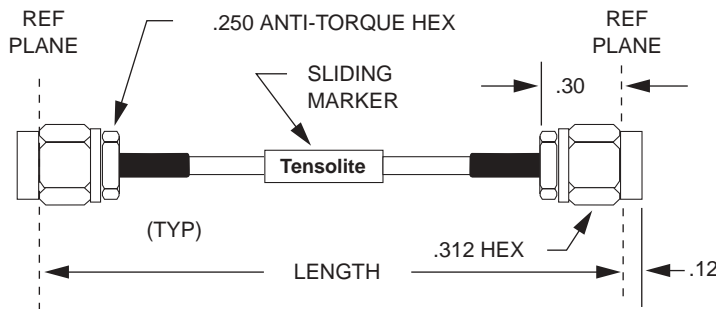
# Q-Flex® Plus Specifications

Q-Flex® Plus assemblies offer even greater flexibility for Semi-Rigid equivalent flexible coax cables. The coax is very flexible, allowing you to bend it in a tight radius with nominal spring back. As an example, Q-Flex® Plus 561 bend force and spring back properties are only half the amount of standard flexible 405 cable. This makes it great for applications such as missile gimbals and test and measurement devices that are in tight locations.

Assembly Cable Code	Bulk Cable P/N	OD
561	LLFP-1087	.115"
563	LLFP-1141	.180"
565	LLFP-1250	.290"

*Flexible Alternatives to RG 405, 402 and 401 with improved attenuation*

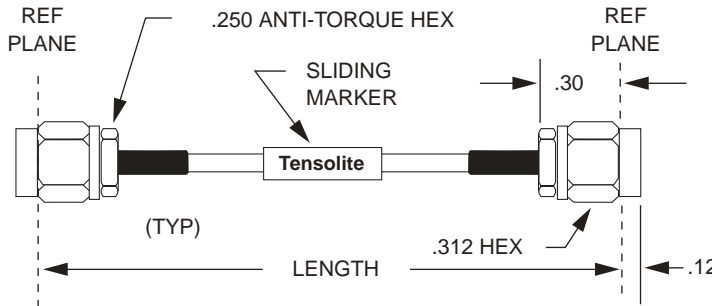
## 18 GHz SMA Male to SMA Male on 561 Q-Flex® Plus Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-561-5204	4.00	0.25	0.3
1-3636-561-5205	5.00	0.25	0.3
1-3636-561-5206	6.00	0.25	0.3
1-3636-561-5208	8.00	0.25	0.3
1-3636-561-5212	12.00	0.25	0.4
1-3636-561-5218	18.00	0.25	0.5
1-3636-561-5224	24.00	0.25	0.7
1-3636-561-5236	36.00	0.36	0.9
1-3636-561-5248	48.00	0.48	1.2

1-3636-561-52XX  
Your Length

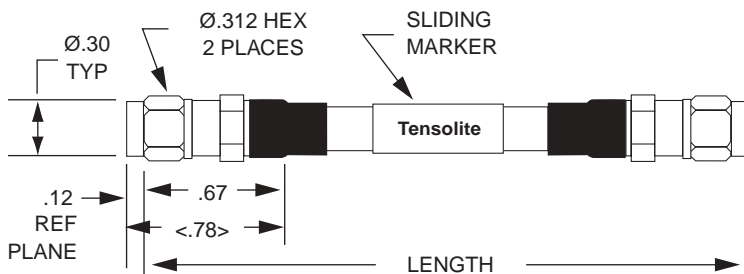
## 18 GHz SMA Male to SMA Male on 563 Q-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-563-3204	4.00	0.3	0.5
1-3636-563-3205	5.00	0.3	0.5
1-3636-563-3206	6.00	0.25	0.6
1-3636-563-3207	7.00	0.25	0.6
1-3636-563-3208	8.00	0.25	0.7
1-3636-563-3210	10.00	0.25	0.8
1-3636-563-3212	12.00	0.25	0.9
1-3636-563-3218	18.00	0.25	1.2
1-3636-563-3224	24.00	0.25	1.6
1-3636-563-3236	36.00	0.36	2.2
1-3636-563-3248	48.00	0.48	2.9

1-3636-563-32XX  
Your Length

## SMA Male to SMA Male on 565 Q-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-565-5105	5.00	0.05	0.8
1-3636-565-5106	6.00	0.05	0.9
1-3636-565-5107	7.00	0.10	1.0
1-3636-565-5108	8.00	0.10	1.2
1-3636-565-5112	12.00	0.10	1.6
1-3636-565-5118	18.00	0.15	2.4
1-3636-565-5124	24.00	0.20	3.1
1-3636-565-5137	37.00	0.20	4.7
1-3636-565-5148	48.00	0.25	6.0

1-3636-565-51XX  
Your Length

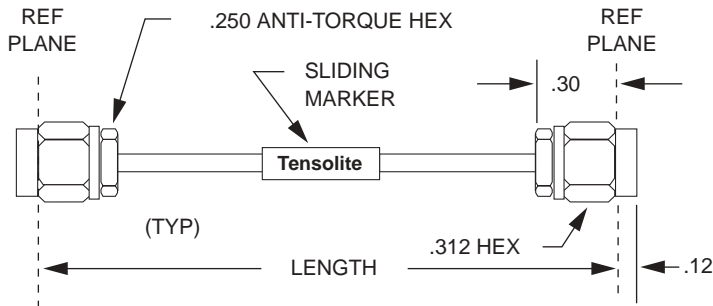
# Semi-Flex® Series

SEMI-FLEX® is a unique ALTERNATIVE to the use of Semi-Rigid coax. A tin-filled wire braid outer conductor allows easy flexing and re-bending by hand. A solid copper secondary outer conductor and Semi-Rigid style core ensure electrical performance comparable to Semi-Rigid.

No significant electrical degradation occurs when SEMI-FLEX® is formed! The cable retains its shape, making installations simple.

Assembly Cable Code	Bulk Cable P/N	OD
604	7-1114-604-18	.047"
600	7-1114-600-18	.086"
601	7-1114-601-18	.141"
606	7-1114-606-18	.250"

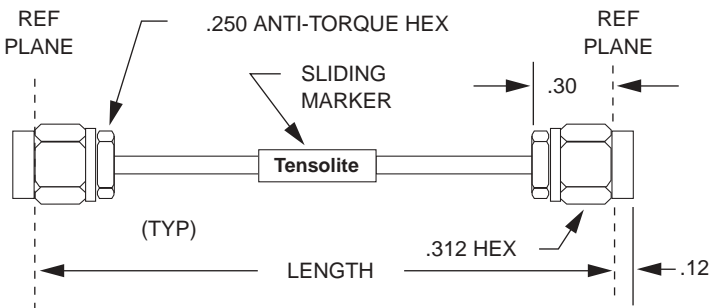
## 18 GHz SMA Male to SMA Male on 604 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-604-5206	6.00	0.10	0.2
1-3636-604-5209	9.00	0.10	0.2
1-3636-604-5212	12.00	0.15	0.3
1-3636-604-5218	18.00	0.15	0.3
1-3636-604-5224	24.00	0.15	0.3
1-3636-604-5236	36.00	0.20	0.4
1-3636-604-5248	48.00	0.20	0.4
1-3636-604-5260	60.00	0.20	0.5
1-3636-604-5272	72.00	0.20	0.5

1-3636-604-52XX  
Your Length

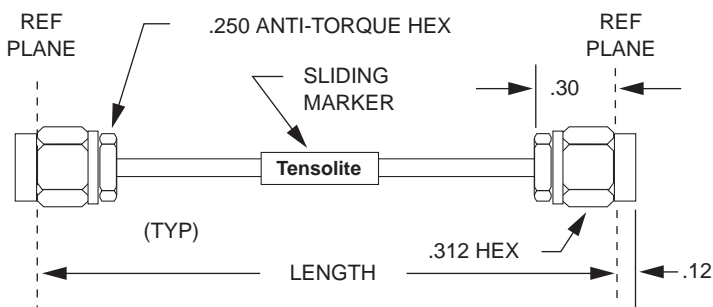
## 18 GHz SMA Male to SMA Male on 600 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-600-5204	4.00	0.05	0.2
1-3636-600-5205	5.00	0.10	0.3
1-3636-600-5206	6.00	0.10	0.3
1-3636-600-5208	8.00	0.10	0.3
1-3636-600-5212	12.00	0.15	0.4
1-3636-600-5218	18.00	0.15	0.5
1-3636-600-5224	24.00	0.15	0.6
1-3636-600-5236	36.00	0.20	0.8
1-3636-600-5248	48.00	0.25	1.0

1-3636-600-52XX  
Your Length

## 18 GHz SMA Male to SMA Male on 601 Semi-Flex® Cable

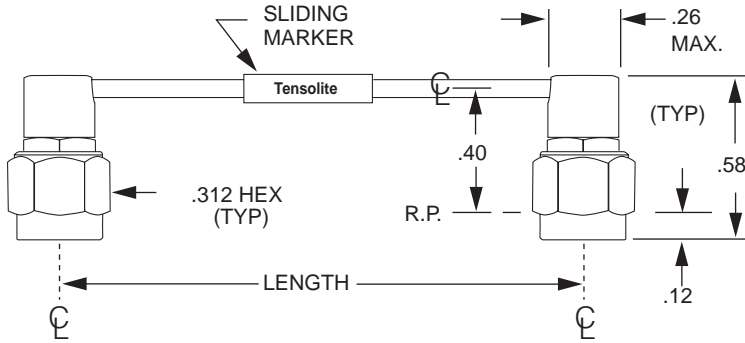


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-601-5204	4.00	0.05	0.3
1-3636-601-5205	5.00	0.10	0.3
1-3636-601-5206	6.00	0.10	0.4
1-3636-601-5208	8.00	0.10	0.4
1-3636-601-5212	12.00	0.15	0.6
1-3636-601-5218	18.00	0.15	0.8
1-3636-601-5224	24.00	0.15	0.9
1-3636-601-5236	36.00	0.20	1.3
1-3636-601-5248	48.00	0.25	1.7

1-3636-601-52XX  
Your Length

# Semi-Flex® Series Specifications

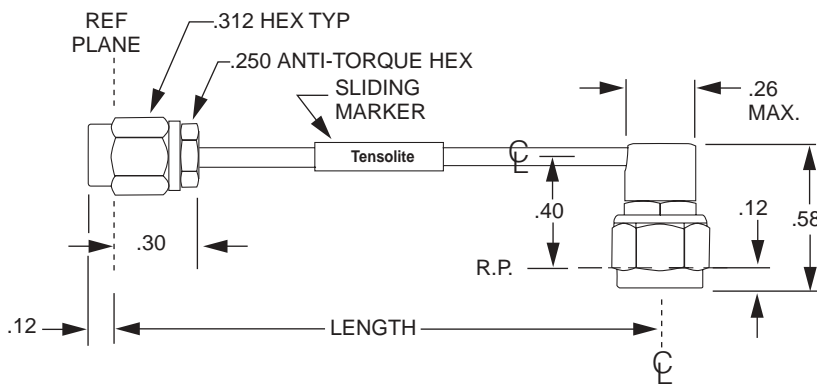
## 18 GHz SMA Male Right Angle to Right Angle on 600 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3737-600-3204	4.00	0.05	0.3
1-3737-600-3205	5.00	0.05	0.4
1-3737-600-3206	6.00	0.05	0.4
1-3737-600-3208	8.00	0.10	0.4
1-3737-600-3212	12.00	0.10	0.5
1-3737-600-3218	18.00	0.15	0.5
1-3737-600-3224	24.00	0.15	0.6
1-3737-600-3236	36.00	0.15	0.8
1-3737-600-3248	48.00	0.20	1.0

1-3737-600-52XX  
Your Length

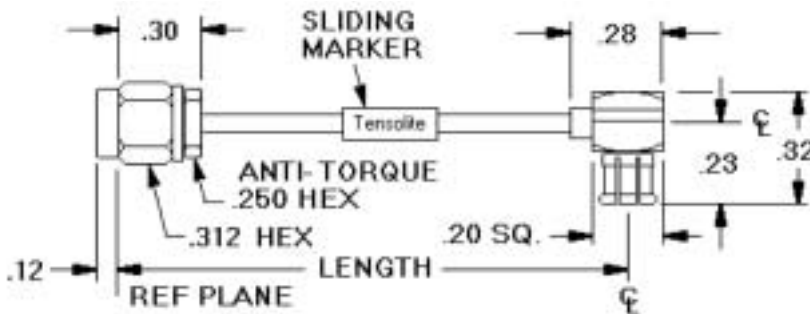
## 18 GHz SMA Male to SMA Male Right Angle on 600 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3637-600-5204	4.00	0.05	0.2
1-3637-600-5205	5.00	0.10	0.3
1-3637-600-5206	6.00	0.10	0.3
1-3637-600-5208	8.00	0.10	0.3
1-3637-600-5212	12.00	0.15	0.4
1-3637-600-5218	18.00	0.15	0.4
1-3637-600-5224	24.00	0.15	0.5
1-3637-600-5236	36.00	0.20	0.7
1-3637-600-5248	48.00	0.25	0.9

1-3637-600-52XX  
Your Length

## 6 GHz SMA Male to MCX Male Right Angle on 600 Semi-Flex® Cable

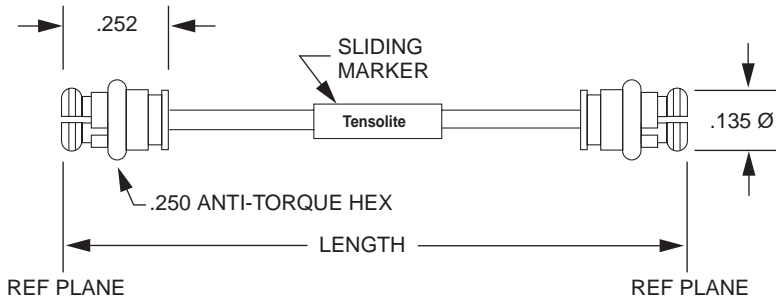


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-36M7-600-5204	4.00	0.25	0.3
1-36M7-600-5205	5.00	0.25	0.3
1-36M7-600-5206	6.00	0.25	0.3
1-36M7-600-5208	8.00	0.25	0.3
1-36M7-600-5212	12.00	0.25	0.4
1-36M7-600-5218	18.00	0.25	0.5
1-36M7-600-5224	24.00	0.24	0.6
1-36M7-600-5236	36.00	0.36	0.8
1-36M7-600-5248	48.00	0.48	0.9

1-36M7-600-52XX  
Your Length

# Semi-Flex® Series Specifications

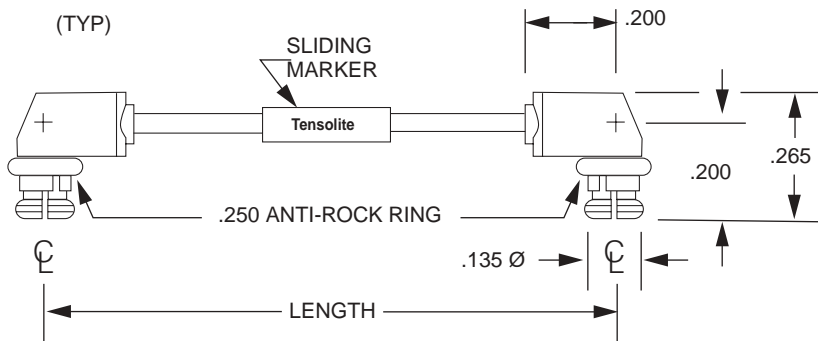
## 40 GHz SMP Plug to SMP Plug on 600 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-G6G6-600-3404	4.00	0.05	0.2
1-G6G6-600-3405	5.00	0.10	0.3
1-G6G6-600-3406	6.00	0.10	0.3
1-G6G6-600-3408	8.00	0.10	0.3
1-G6G6-600-3412	12.00	0.15	0.4
1-G6G6-600-3418	18.00	0.15	0.5
1-G6G6-600-3424	24.00	0.15	0.6
1-G6G6-600-3436	36.00	0.20	0.8
1-G6G6-600-3448	48.00	0.25	1.0

1-G6G6-600-34XX  
Your Length →

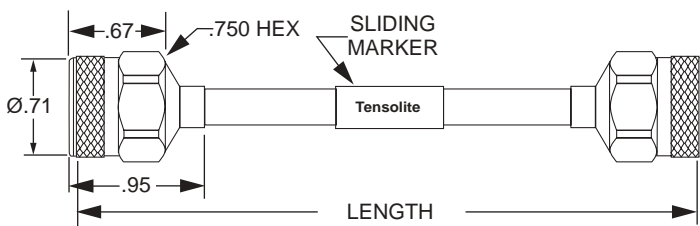
## 26.5 GHz SMP Right Angle Plug to SMP Right Angle Plug on 600 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-G7G7-600-3304	4.00	0.05	0.2
1-G7G7-600-3305	5.00	0.10	0.3
1-G7G7-600-3306	6.00	0.10	0.3
1-G7G7-600-3308	8.00	0.10	0.3
1-G7G7-600-3312	12.00	0.15	0.4
1-G7G7-600-3318	18.00	0.15	0.5
1-G7G7-600-3324	24.00	0.15	0.6
1-G7G7-600-3336	36.00	0.20	0.8
1-G7G7-600-3348	48.00	0.25	1.0

1-G7G7-600-33XX  
Your Length →

## 18 GHz Type N Male to Type N Male on 606 Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-1818-606-3204	4.00	0.10	2.56
1-1818-606-3205	5.00	0.10	2.68
1-1818-606-3206	6.00	0.10	2.80
1-1818-606-3208	8.00	0.10	3.05
1-1818-606-3212	12.00	0.10	3.53
1-1818-606-3218	18.00	0.15	4.26
1-1818-606-3224	24.00	0.15	4.99
1-1818-606-3236	36.00	0.15	6.44
1-1818-606-3248	48.00	0.20	7.90

1-1818-606-32XX  
Your Length →



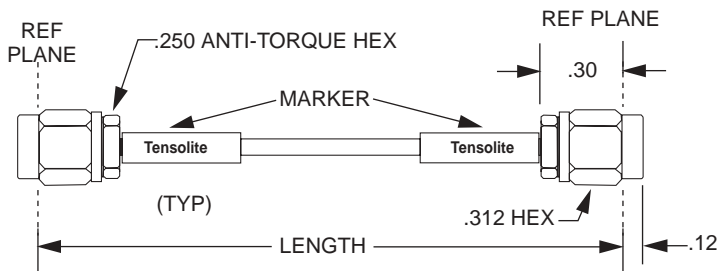
# Semi-Flex® Plus Series

Semi-Flex® Plus allows the user to have the advantages of a hand formable cable and a flexible cable all in one. Semi-Flex® Plus enhances Tensolite's Semi-Flex® by using a clear polyurethane jacket over a tin-filled wire braid outer conductor. A solid secondary outer conductor and Semi-Rigid style core ensure electrical performance comparable to Semi-Rigid. If your application calls for High Temperature, use our Semi-Flex® Plus "High Temperature" 650 or 651 Series (-50 to 200° C) by adding our FEP jacket.

Assembly Cable Code OD

620	.112"
621	.180"
650	.100"

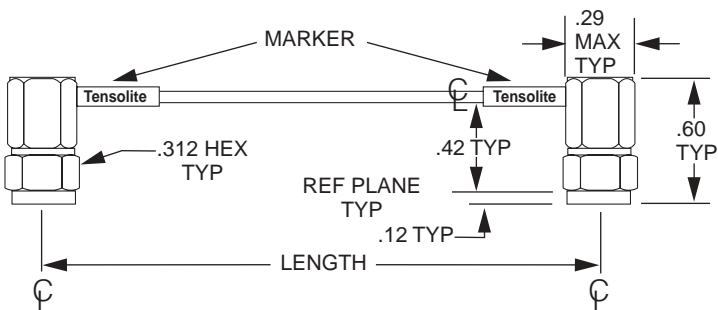
## 18 GHz SMA Male to SMA Male on 620 Jacketed Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-620-5204	4.00	0.05	0.3
1-3636-620-5205	5.00	0.05	0.3
1-3636-620-5206	6.00	0.10	0.3
1-3636-620-5208	8.00	0.10	0.3
1-3636-620-5212	12.00	0.15	0.4
1-3636-620-5218	18.00	0.15	0.5
1-3636-620-5224	24.00	0.15	0.7
1-3636-620-5236	36.00	0.15	0.9
1-3636-620-5248	48.00	0.20	1.1

1-3636-620-52XX  
Your Length

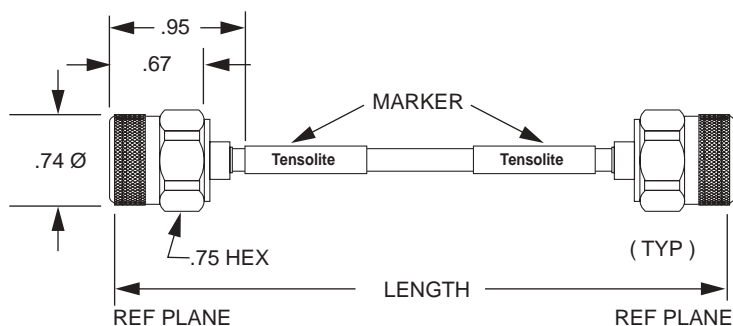
## 18 GHz SMA Male Right Angles on 620 Semi-Flex® Plus Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3737-620-3204	4.00	0.05	0.4
1-3737-620-3205	5.00	0.05	0.4
1-3737-620-3206	6.00	0.10	0.4
1-3737-620-3208	8.00	0.10	0.4
1-3737-620-3212	12.00	0.15	0.5
1-3737-620-3218	18.00	0.15	0.6
1-3737-620-3224	24.00	0.15	0.8
1-3737-620-3236	36.00	0.15	1.0
1-3737-620-3248	48.00	0.20	1.2

1-3737-620-32XX  
Your Length

## 18 GHz type N Male to Type N Male on 621 Jacketed Semi-Flex® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-1818-621-3204	4.00	0.05	2.2
1-1818-621-3205	5.00	0.05	2.2
1-1818-621-3206	6.00	0.05	2.3
1-1818-621-3208	8.00	0.10	2.4
1-1818-621-3212	12.00	0.10	2.5
1-1818-621-3218	18.00	0.15	2.7
1-1818-621-3224	24.00	0.15	2.9
1-1818-621-3236	36.00	0.15	3.3
1-1818-621-3248	48.00	0.20	3.7

1-1818-621-32XX  
Your Length

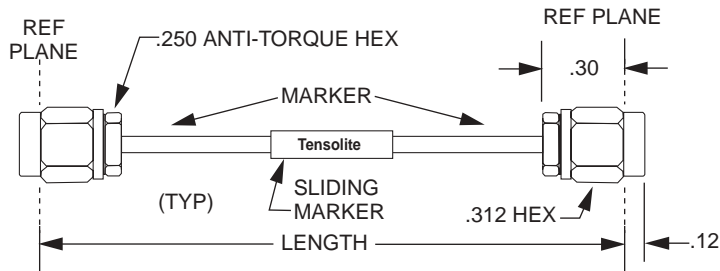
# Semi-Flex® II Series Specifications

Semi-Flex® II is a thin walled, soft aluminum jacketed Semi-Rigid cable. The more pliable outer conductor allows easier forming than copper jacketed cable while retaining much of the same electrical performance.

Semi-Flex® II, along with original, high performance Semi-Flex®, rounds out the designer's options for alternatives to traditional Semi-Rigid cable assemblies.

Assembly Cable Code	OD
617	.086"
618	.141"

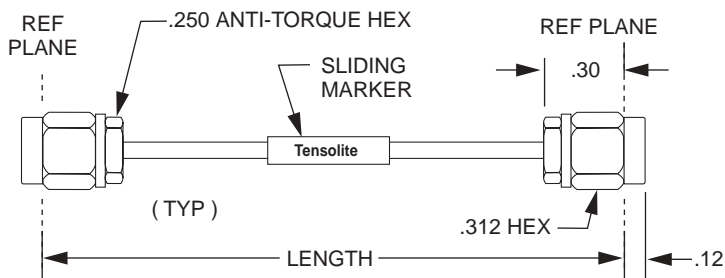
## 18 GHz SMA Male to SMA Male on 617 Semi-Flex® II Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-617-5204	4.00	0.05	0.2
1-3636-617-5205	5.00	0.10	0.2
1-3636-617-5206	6.00	0.10	0.2
1-3636-617-5208	8.00	0.10	0.3
1-3636-617-5212	12.00	0.15	0.3
1-3636-617-5218	18.00	0.15	0.4
1-3636-617-5224	24.00	0.15	0.4
1-3636-617-5236	36.00	0.20	0.6
1-3636-617-5248	48.00	0.25	0.7

1-3636-617-52XX  
Your Length

## 18 GHz SMA Male to SMA Male on 618 Semi-Flex® II Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-618-5204	4.00	0.05	1.1
1-3636-618-5205	5.00	0.10	1.3
1-3636-618-5206	6.00	0.10	1.5
1-3636-618-5208	8.00	0.10	2.0
1-3636-618-5212	12.00	0.15	2.9
1-3636-618-5218	18.00	0.15	4.3
1-3636-618-5224	24.00	0.15	5.7
1-3636-618-5236	36.00	0.20	8.4
1-3636-618-5248	48.00	0.25	11.1

1-3636-618-52XX  
Your Length

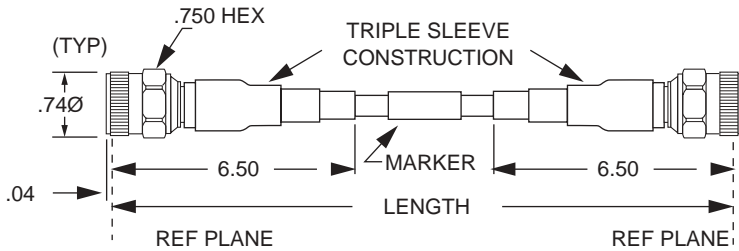
The Workhorse® Family is the result of Tensolite's years of assembly experience coupled with the demand for lower cost products. The Workhorse® assembly uses the time proven "504" cable, the Workhorse® Plus utilizes the "524" cable that provides better flexibility, and the Low Loss Workhorse® uses Tensolite's 301 Low Loss cable. All Workhorse® assemblies utilize our most rugged stainless steel connectors and a new extremely durable, yet cost effective attachment method.

18 and 26.5 GHz Cable Assemblies

## Features:

- Extremely durable and long lasting connector attachment method
- Excellent high frequency response
- Phase stable with flexure
- Standard lengths in stock

### Type N Male to Type N Male on Workhorse® Cable

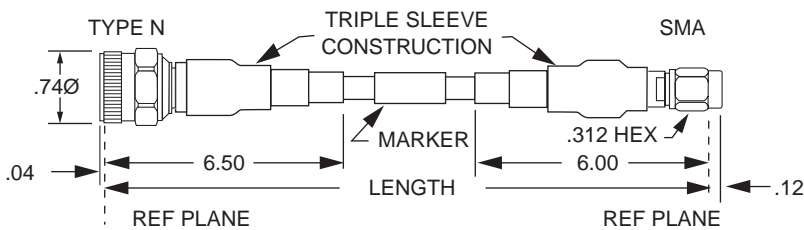


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WHU18-1818-024	24.00	0.25	5.3
WHU18-1818-030	30.00	0.30	5.6
WHU18-1818-036	36.00	0.36	5.9
WHU18-1818-042	42.00	0.42	6.3
WHU18-1818-048	48.00	0.48	6.6
WHU18-1818-072	72.00	0.72	8.0
WHU18-1818-120	120.00	1.20	10.8

WHU18-1818-XXX

Your Length

### Type N to SMA Male on Workhorse® Cable

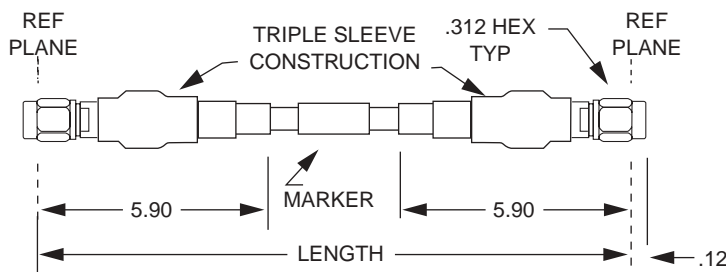


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WHU18-1836-024	24.00	0.25	4.8
WHU18-1836-030	30.00	0.30	5.1
WHU18-1836-036	36.00	0.36	5.4
WHU18-1836-042	42.00	0.42	5.8
WHU18-1836-048	48.00	0.48	6.1
WHU18-1836-072	72.00	0.72	7.5
WHU18-1836-120	120.00	1.20	10.3

WHU18-1836-XXX

Your Length

### SMA Males on Workhorse® Cable

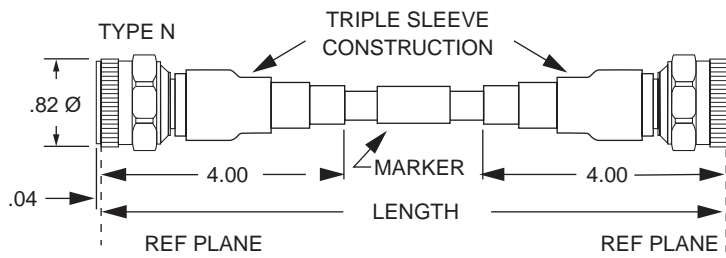


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WHU18-3636-024	24.00	0.25	3.7
WHU18-3636-030	30.00	0.30	4.0
WHU18-3636-036	36.00	0.36	4.3
WHU18-3636-042	42.00	0.42	4.7
WHU18-3636-048	48.00	0.48	5.0
WHU18-3636-072	72.00	0.72	6.4
WHU18-3636-120	120.00	1.20	9.2

WHU18-3636-XXX

Your Length

## Type N Male to N Male on Workhorse® Plus Cable

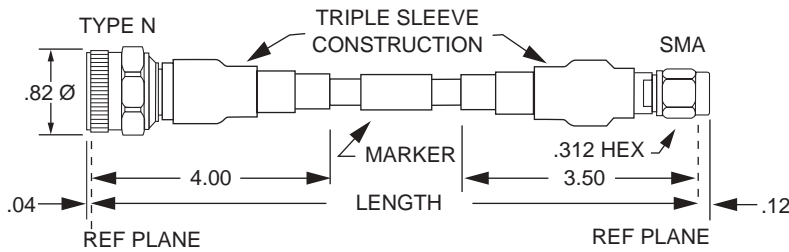


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-1818-524-WH 24	24.00	0.25	5.4
1-1818-524-WH 30	30.00	0.30	5.8
1-1818-524-WH 36	36.00	0.36	6.1
1-1818-524-WH 39	39.4	0.39	6.3
1-1818-524-WH 48	48.00	0.48	6.9
1-1818-524-WH 72	72.00	0.72	8.4
2-1818-524-WH 10	120.00	1.20	11.4

1-1818-524-WH XX

Your Length →

## Type N Male to Hybrid SMA Male on Workhorse® Plus Cable

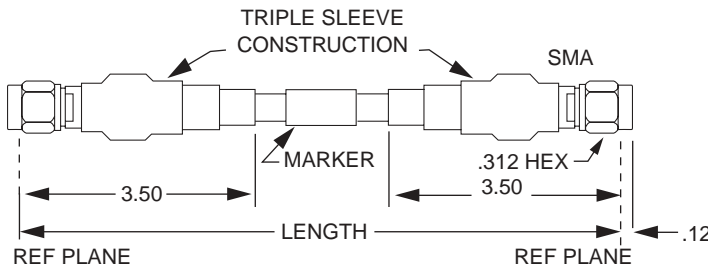


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-1836-524-WH 24	24.00	0.25	5.4
1-1836-524-WH 30	30.00	0.30	5.8
1-1836-524-WH 36	36.00	0.36	6.1
1-1836-524-WH 42	39.00	0.39	6.3
1-1836-524-WH 48	48.00	0.48	6.9
1-1836-524-WH 72	72.00	0.72	8.4
2-1836-524-WH 10	120.00	1.20	11.4

1-1836-524-WH XX

Your Length →

## Hybrid SMA Male to SMA Male on Workhorse® Plus Cable



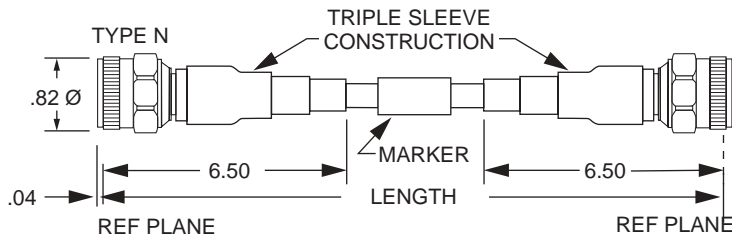
Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-524-WH 24	24.00	0.25	5.4
1-3636-524-WH 30	30.00	0.25	5.8
1-3636-524-WH 36	36.00	0.36	6.1
1-3636-524-WH 42	42.00	0.42	6.5
1-3636-524-WH 48	48.00	0.48	6.9
1-3636-524-WH 72	72.00	0.72	8.4
2-3636-524-WH 10	120.00	1.20	11.4

1-3636-524-WH XX

Your Length →

# Low Loss Workhorse®

## Type N Males on Low Loss Workhorse® Cable

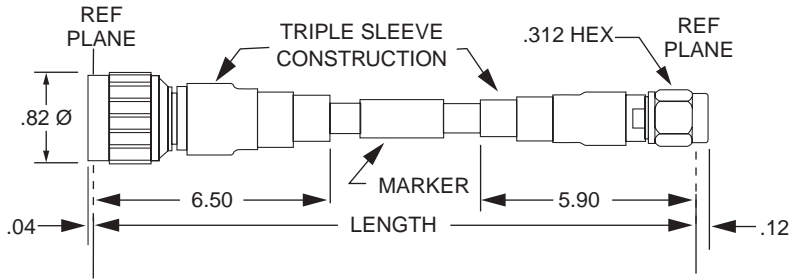


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WLU18-1818-024	24.00	0.25	4.6
WLU18-1818-030	30.00	0.30	4.9
WLU18-1818-036	36.00	0.36	5.2
WLU18-1818-042	42.00	0.42	5.4
WLU18-1818-048	48.00	0.48	5.7
WLU18-1818-072	72.00	0.72	6.8
WLU18-1818-120	120.00	1.20	9.1

WLU18-1818-XXX

Your Length

## Type N and SMA Males on Low Loss Workhorse® Cable

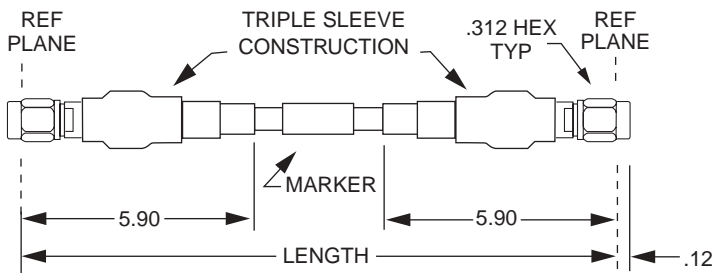


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WLU18-1836-024	24.00	0.25	4.5
WLU18-1836-030	30.00	0.30	4.8
WLU18-1836-036	36.00	0.36	5.1
WLU18-1836-042	42.00	0.42	5.3
WLU18-1836-048	48.00	0.48	5.6
WLU18-1836-072	72.00	0.72	6.7
WLU18-1836-120	120.00	1.20	9.0

WLU18-1836-XXX

Your Length

## SMA Males on Low Loss Workhorse® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WLU18-3636-024	24.00	0.25	3.4
WLU18-3636-030	30.00	0.30	3.7
WLU18-3636-036	36.00	0.36	4.0
WLU18-3636-042	42.00	0.42	4.2
WLU18-3636-048	48.00	0.48	4.5
WLU18-3636-072	72.00	0.72	5.6
WLU18-3636-120	120.00	1.20	7.9

WLU18-3636-XXX

Your Length



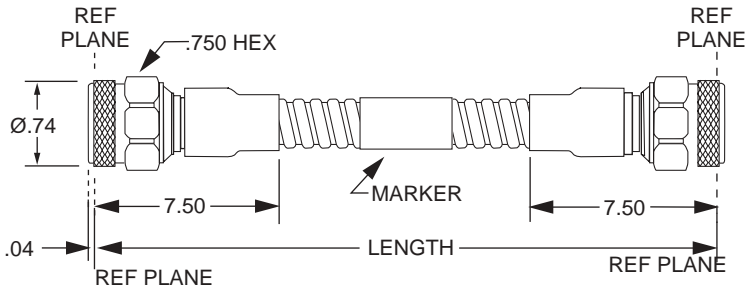
# The Armored Workhorse®

The Armored Workhorse® features a stainless steel, crush-proof jacket that protects the Tensolite "504" cable from everyday wear and tear associated with a lab environment. Combined with our rugged stainless steel connector series, this provides an extremely durable test cable for high temperature testing and very high volume production lines.

## Features:

- "Armored" for even greater protection
- Excellent high frequency response
- Phase stable with flexure
- Standard lengths in stock

### Type N Males on Armored Workhorse® Cable

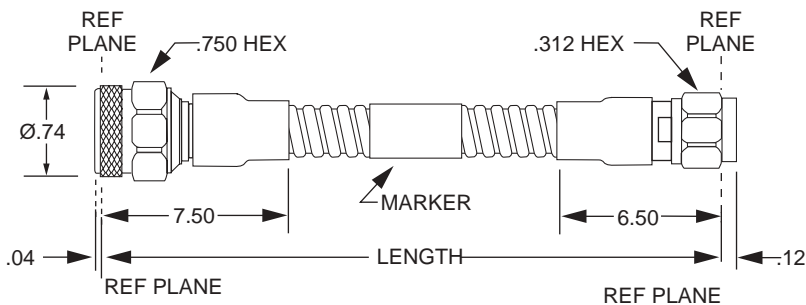


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WHA18-1818-024	24.00	0.25	7.1
WHA18-1818-030	30.00	0.30	7.8
WHA18-1818-036	36.00	0.36	8.6
WHA18-1818-042	42.00	0.42	9.4
WHA18-1818-048	48.00	0.48	10.2
WHA18-1818-072	72.00	0.72	13.4
WHA18-1818-120	120.00	1.20	19.8

WHA18-1818-XXX

Your Length

### Type N Male to SMA Male on Armored Workhorse® Cable

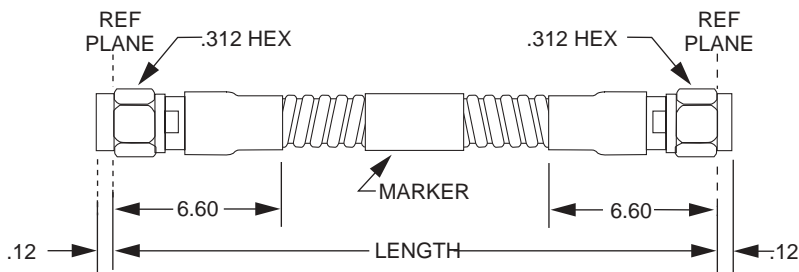


Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WHA18-1836-024	24.00	0.25	6.6
WHA18-1836-030	30.00	0.30	7.3
WHA18-1836-036	36.00	0.36	8.1
WHA18-1836-042	42.00	0.42	8.9
WHA18-1836-048	48.00	0.48	9.7
WHA18-1836-072	72.00	0.72	12.9
WHA18-1836-120	120.00	1.20	19.3

WHA1818-1836-XXX

Your Length

### SMA Males on Armored Workhorse® Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
WHA18-3636-024	24.00	0.25	6.2
WHA18-3636-030	30.00	0.30	6.9
WHA18-3636-036	36.00	0.36	7.7
WHA18-3636-042	42.00	0.42	8.5
WHA18-3636-048	48.00	0.48	9.3
WHA18-3636-072	72.00	0.72	12.5
WHA18-3636-120	120.00	1.20	18.9

WHA18-3636-XXX

Your Length

# Low Cost, Low Loss 18GHz 301 Cable Assemblies

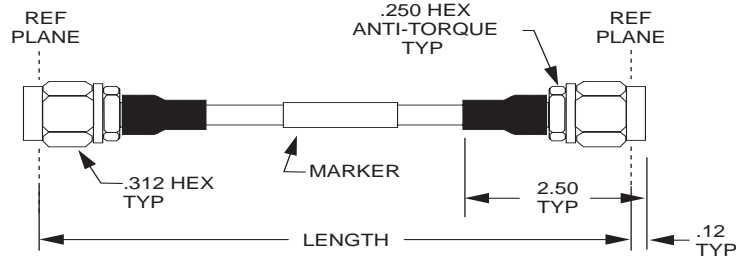
Tensolite's newly developed LOW COST, LOW LOSS "301" cable ends the 3-way compromise users face when defining insertion loss for higher frequency, flexible cable assemblies. Historically, low loss meant high price or reduced flexibility. "301" cable is a microporous PTFE design in .200" diameter that offers all three advantages: low loss, low price and excellent flexibility.

"301" LOW COST, LOW LOSS assemblies help the designer achieve system performance goals while retaining the flexibility of braided cables. Alternatively, "301" cables may be used to replace .141" diameter Semi-Rigid or .250" diameter corrugated copper cables.

## Features:

- Low insertion loss
- Microporous PTFE dielectric
- Increased flexibility
- Standard lengths in stock

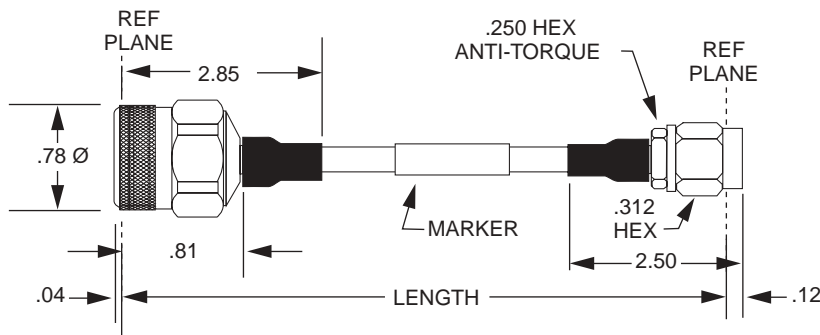
### SMA Male to SMA Male on 301 Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3636-301-3206	6.00	0.25	1.5
1-3636-301-3212	12.00	0.25	1.8
1-3636-301-3218	18.00	0.25	2.2
1-3636-301-3224	24.00	0.25	2.5
1-3636-301-3248	48.00	0.48	3.8

1-3636-301-32XX  
Your Length

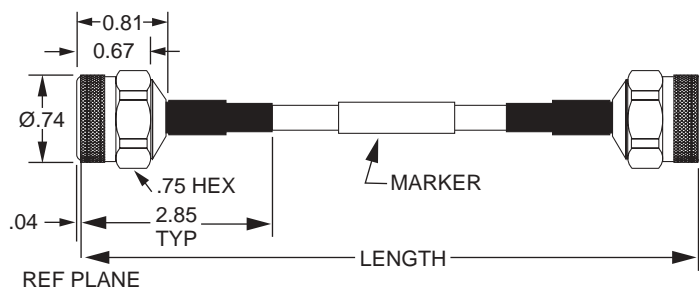
### Type N Male to SMA Male on 301 Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-1836-301-3206	6.00	0.25	1.5
1-1836-301-3212	12.00	0.25	1.8
1-1836-301-3218	18.00	0.25	2.2
1-1836-301-3224	24.00	0.25	2.5
1-1836-301-3236	36.00	0.36	3.1
1-1836-301-3248	48.00	0.48	3.8

1-1836-301-32XX  
Your Length

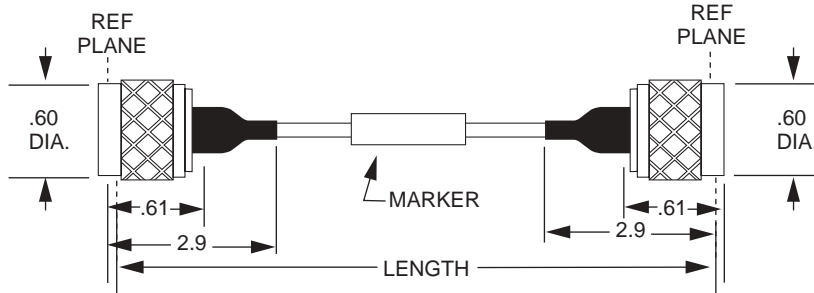
### Type N Male to Type N Male on 301 Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-1818-301-3206	6.00	0.25	2.4
1-1818-301-3212	12.00	0.25	2.8
1-1818-301-3218	18.00	0.25	3.1
1-1818-301-3224	24.00	0.25	3.5
1-1818-301-3236	36.00	0.36	4.2
1-1818-301-3248	48.00	0.48	4.9

1-1818-301-32XX  
Your Length

### TNC Male to TNC Male on 301 Cable



Tensolite Part Number	Length Inches	+ - Inches	Weight Ounces
1-3030-301-3206	6.00	0.05	2.4
1-3030-301-3212	12.00	0.10	2.7
1-3030-301-3218	18.00	0.15	3.0
1-3030-301-3224	24.00	0.15	3.4
1-3030-301-3236	36.00	0.15	4.0
1-3030-301-3248	48.00	0.20	4.6

1-3030-301-32XX  
Your Length

# Workhorse® 40 Armored Cable

The Tensolite “Workhorse 40” Armored Cable Assembly is designed to perform in high volume, strenuous test environments. Its rugged design provides protection from wear and tear reducing the need for costly replacement test cables.

Tensolite's years of assembly experience combined with a demand for lower cost production solutions resulted in the development of the “Workhorse 40”.

The “Workhorse 40” utilizes a new Tensolite cable encased in a stainless steel, crush resistant armor. The cable provides low loss and low VSWR, while maintaining phase stability.

Tensolite designed “SMK”(2.92) tough stainless steel connectors combined with the cable deliver more tests with maximum accuracy and repeatability.

The “Workhorse 40” Armored assembly will stand the test of time!

Typical VSWR 1.35:1 @ 40 GHz  
 Typical Loss 2dB per foot,  
 Assembly Temperature Rating -  
 50°C to +105°C

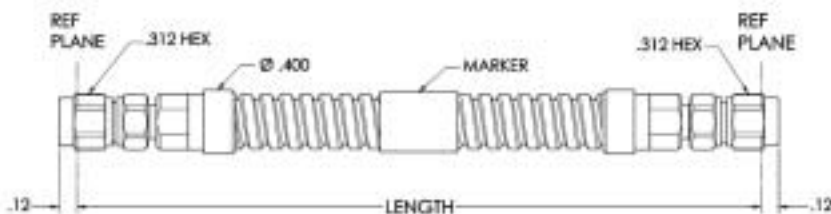
## Intended Applications:

- High Volume Test Lab
- Vector Network Analyzer
- Calibration
- Antenna Range
- Custom Applications

### 2.92MM males on 40GHz Workhorse® Cable

ELECTRICAL SPECIFICATIONS	
IMPEDANCE, NOMINAL:	50 OHMS
CAPACITANCE NOMINAL:	28.0 pF/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	79.5 %
RELATIVE SHIELDING:	-100.0 dB MIN.
INSULATION RESISTANCE:	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1069 VRMS MAX.
ELECTRICAL DELAY, NOMINAL:	1.44 ns/FOOT
ELECTRICAL DELAY, NOMINAL:	120 ps/INCH
F (IN GHz) →	2    6    12    18    26    40
MAX. CW WATTS →	54   30   20   16   12   9

MECHANICAL SPECIFICATIONS:	
CABLE MAX. DIAMETER:	0.360 INCHES
MINIMUM BEND RADIUS:	2.10 INCHES
CONNECTOR RETENTION:	60 POUNDS MIN.
TEMPERATURE RANGE:	-55 to +105 DEGREES C
MATING TORQUE:	7-10 INCH POUNDS
CONNECTOR INTERFACE:	IEEE-STD-287



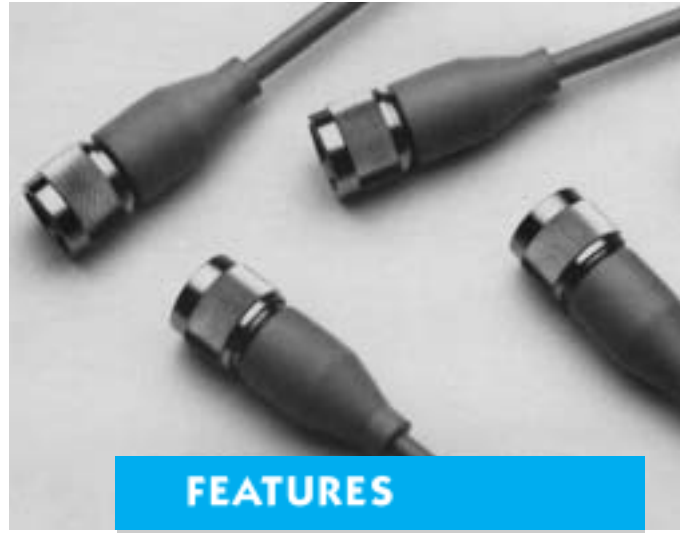
MATERIALS AND FINISHES		
DESCRIPTION	MATERIAL	FINISH OR COLOR
ARMOR:	STAINLESS STEEL STRIP	NONE
CONTACTS:	ASTM-B196 BiCu C173	ASTM B-488, GOLD PLATED
BEAD:	NORYL	NONE
BODY CABLE ENTRY:	ASTM-A-562, 303 STAINLESS STEEL	ASTM A-967, PASSIVATED
BODY:	ASTM-A-562, 303 STAINLESS STEEL	ASTM A-967, PASSIVATED
NUT:	ASTM-A-562, 303 STAINLESS STEEL	ASTM A-967, PASSIVATED
RETAINING RING:	ASTM-B196 BiCu C173	NONE
AVAILABLE GASKET:	ZZ-R-785, SILICON RUBBER	RED
SOLVENTS:	NO OZONE DEPLETING MATERIALS ARE USED	

PART NUMBER	LENGTH INCHES	± LENGTH	WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz)						MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz)						LENGTH CM
				UP TO 2	2 TO 6	6 TO 12	12 TO 18	18 TO 26	26 TO 40	UP TO 2	2 TO 6	6 TO 12	12 TO 18	18 TO 26	26 TO 40	
WHA40-K6K5-0 24	S 24.0	0.25	4.5	1.08	1.12	1.20	1.25	1.32	1.35	0.75	1.35	2.01	2.57	3.22	4.39	61.0
WHA40-K6K5-0 30	30.0	0.30	4.6	1.08	1.12	1.20	1.25	1.32	1.35	0.91	1.65	2.45	3.14	3.94	5.33	76.2
WHA40-K6K5-0 36	S 36.0	0.36	4.8	1.08	1.12	1.20	1.25	1.32	1.35	1.07	1.95	2.90	3.71	4.65	6.28	91.4
WHA40-K6K5-0 42	42.0	0.42	4.9	1.08	1.12	1.20	1.25	1.32	1.35	1.23	2.25	3.35	4.28	5.37	7.22	106.7
WHA40-K6K5-0 48	S 48.0	0.48	5.1	1.08	1.12	1.20	1.25	1.32	1.35	1.39	2.55	3.79	4.85	6.08	8.16	121.9
WHA40-K6K5-0 54	54.0	0.54	5.2	1.12	1.15	1.23	1.28	1.33	1.38	1.56	2.84	4.24	5.42	6.80	9.11	137.2
WHA40-K6K5-0 60	60.0	0.60	5.4	1.12	1.15	1.23	1.28	1.33	1.38	1.72	3.14	4.69	5.99	7.52	10.05	152.4
WHA40-K6K5-0 66	66.0	0.66	5.5	1.12	1.15	1.23	1.28	1.33	1.38	1.88	3.44	5.13	6.56	8.23	10.99	167.6
WHA40-K6K5-0 72	72.0	0.72	5.7	1.12	1.15	1.23	1.28	1.33	1.38	2.04	3.74	5.58	7.13	9.05	11.94	182.9
WHA40-K6K5-0 78	78.0	0.78	5.9	1.12	1.15	1.23	1.28	1.33	1.38	2.20	4.04	6.03	7.70	9.67	12.88	198.1
WHA40-K6K5-0 84	84.0	0.84	6.0	1.12	1.15	1.23	1.28	1.33	1.38	2.36	4.33	6.47	8.27	10.38	13.82	213.4
WHA40-K6K5-0 90	90.0	0.90	6.2	1.12	1.15	1.23	1.28	1.33	1.38	2.53	4.63	6.92	8.84	11.10	14.77	228.6
WHA40-K6K5-0 96	96.0	0.96	6.3	1.12	1.15	1.23	1.28	1.33	1.38	2.69	4.93	7.36	9.41	11.81	15.71	243.8
WHA40-K6K5-1 20	120.0	1.20	6.9	1.13	1.18	1.25	1.31	1.36	1.41	3.33	6.12	9.15	11.69	14.89	19.48	304.8

S = STANDARD ITEM      MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY.  
 NOTE: PRODUCT SPECIFICATIONS ARE VERIFIED AT 73 DEG. F, SEA LEVEL AND 20 TO 80% RELATIVE HUMIDITY.  
 PRODUCT SPECIFICATIONS APPLY AT 5 TO 95% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.  
 WORKHORSE IS A REGISTERED TRADEMARK OF TENSOLITE CO.  
 VISIT OUR WEB SITE AT <http://www.tensolite.com>

# TSI818 and TS7878 Series

## Test Equipment Replacement Cables



### DESCRIPTION

The TS series of flexible cable assemblies is equivalent to the cables that Tensolite supplies to the test and measurement industry.

They offer the same reliable construction and repeatable performance as the original test cables. The TS series is built and tested under rigid quality controlled conditions to meet testing standards.

Cables may be purchased in sets or individually. Phase matching is maintained because all cables are matched to a laboratory standard in accordance with the OEM specification.

### FEATURES

- DC to 6.0 GHz  
6 to 18.0 GHz
- OEM design equivalent
- Phase matched to a laboratory standard
- Available as sets or individually
- 24-hour delivery
- May be used with other manufacturers test equipment

# Tensolite Cable Assembly Technical Data

## ELECTRICAL SPECIFICATIONS

IMPEDANCE, NOMINAL:	50	OHMS
CAPACITANCE NOMINAL:	29.4	pf/FOOT
VELOCITY OF PROPAGATION, NOMINAL:	70.7	%
RELATIVE SHIELDING PARALLEL TOUCHING 24 IN:	-100.0	dB MIN.
INSULATION RESISTANCE:	1000	MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE:	1000	VRMS MIN.
ELECTRICAL DELAY NOMINAL:	1.44	ns /FOOT
ELECTRICAL DELAY NOMINAL:	120	ps /INCH
PULSE RF POWER:	1250	WATTS MAX.

(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

F (IN GHz)→	1	2	4	6	12	18
MAX. CW WATTS →	50	35	22	17	6	4
PHASE STABILITY DEG.	0.3	0.6	1.2	1.8	3.6	5.4
LOSS STABILITY dB→	0.01	0.01	0.01	0.015	0.03	0.05

CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

Cables are manufactured as matched sets or matched to laboratory standards.

Cables maintain network analyzer compatible characteristics during product life

when formed up to 180 degrees at a 4 inch (2.5 inch for TS1818-07) or greater radius.

## MECHANICAL SPECIFICATIONS:

CABLE MAX. DIAMETER:	0.220	INCHES
MIN. ONE TIME BEND RADIUS:	1.50	INCHES
FLEXED BEND RADIUS:	4.00	INCHES
CONNECTOR RETENTION:	100	POUNDS MIN.
TEMPERATURE RANGE:	-13 TO +33	DEGREES C
MATING TORQUE:	7-10	INCH POUNDS
CONNECTOR INTERFACES:	MIL-STD-348(N)	IEEE 287 (7MM)

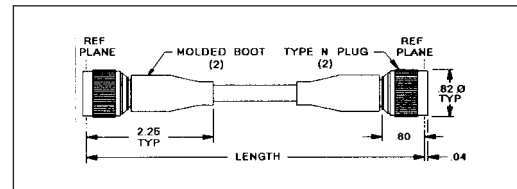
## MATERIALS AND FINISHES

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET:	PVC	GRAY
MARKING:	-	BLACK
BOOTS:	RUBBER COMPOUND	GRAY
SOLDER:	QQ-S-571	NONE
FLUX:	MIL-F-14256, RMA	NONE
CONTACTS:	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
N INSULATORS:	ASTM D1457 PTFE	NONE
7 MM INSULATORS	PTFE COMPOSITE	NONE
N CONNECTOR BODY	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
7 MM CONNECTOR BODY	ASTM B196 BeCu	MIL-G-45204 GOLD PLATED
NUTS:	ASTM A 582 303 STAINLESS STEEL	QQ-P-35 PASSIVATED
AVAILABLE GASKET:	ZZ-R-765 SILICON RUBBER	RED

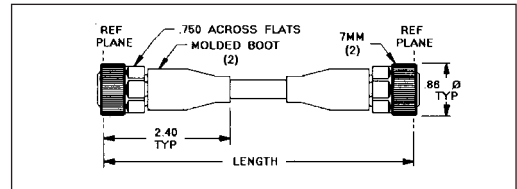
THIS TYPE N CONNECTOR DOES NOT HAVE A WEATHER SEALING GASKET.  
A USER INSTALLED TYPE N GASKET IS AVAILABLE.  
ORDER GASKET, PART NUMBER 5-1368-100-17.

SOLVENTS: NO OZONE DEPLETING MATERIALS USED

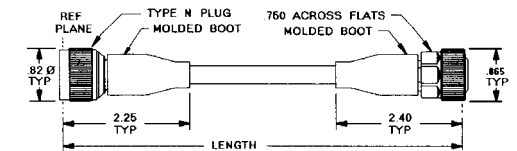
## TS SERIES CABLE ASSEMBLIES



TS1818 CONFIGURATION



TS7878 CONFIGURATION



TS1878 CONFIGURATION

## OTHER AVAILABLE CONFIGURATIONS:

CONN. 1	CONN. 2	LENGTH	PART NUMBER	PRODUCT SPECIFICATIONS
N MALE	7MM	24	TS1878-24	SEE TS1818-24 ABOVE
N MALE	7MM	34	TS1878-34	SEE TS1818-34 ABOVE
7MM	7MM	34	TS7878-34	SEE TS1818-34 ABOVE

PART NUMBER	CONN	LENGTH INCHES	+ - LENGTH	MAX.WEIGHT OUNCES	MAXIMUM VSWR :1 AT FREQUENCY (IN GHz.)								MAXIMUM INSERTION LOSS IN dB AT FREQ. (IN GHz.)						LENGTH CM
					UP TO 1	1 TO 2	2 TO 3	3 TO 6	6 TO 12 REF.	12 TO 18 REF.	UP TO 1	1 TO 2	2 TO 3	3 TO 6	6 TO 12 REF.	12 TO 18 REF.			
TS1818-07	N	7.5	0.38	4.3	1.07	1.10	1.13	1.18	1.25	-	0.16	0.21	0.27	0.38	0.55	-	19.1		
TS1818-07S	N	4-7.5 INCH CABLES			-	-	-	-	-	-	-	-	-	-	-	-	-		
TS1818-24	N	24.0	1.20	5.3	1.07	1.10	1.13	1.18	1.25	-	0.32	0.46	0.58	0.85	1.28	-	61.0		
TSA1818-34	N	24	1.20	5.3	1.06	1.06	1.06				0.32	0.46	0.58	0.85	1.28	-	61.0		
TS1818-34	N	34.0	1.70	5.8	1.07	1.10	1.13	1.18	1.25	-	0.43	0.61	0.77	1.13	1.71	-	86.4		
TS1818-STR	SET 3-24 AND 1-34 INCH CABLES				-	-	-	-	-	-	-	-	-	-	-	-	-		
TS7878-24	7MM	24.0	1.20	5.3	1.07	1.10	1.12	1.16	1.22	1.30	0.32	0.46	0.58	0.85	1.28	1.66	61.0		
TS7878-ST5	7MM	2-24 INCH CABLES			-	-	-	-	-	-	-	-	-	-	-	-	-		

MAXIMUM SPECIFICATIONS ARE PRODUCT MAXIMUM INCLUDING MEASURING SYSTEM UNCERTAINTY. SPECIFICATIONS FROM 6 THRU 18 GHz ARE NOT VERIFIED AND ARE FOR REFERENCE ONLY.

CONN	LENGTH	ORDER TENSOLITE PART NUMBER
N	24,34	TS1818-STR (SET OF 3-24, 1-34)
7MM	24	TS7878-ST5 (SET OF 2-7MM)
7MM	24	TS7878-24
N	34	TS1818-34
N	24	TS1818-24
N	8	TS1818-07
N	7.5	TS1818-07S (SET OF 4-7.5)
N	24	TSA1818-24V

TS1818-STR IS A SET OF 3-24 INCH AND 1-34 INCH TYPE N CABLES USED TO INTERCONNECT TRANSMISSION REFLECTION TEST SETS AND POWER SPLITTERS  
TS7878-ST5 IS A SET OF 2 MATCHED 24 INCH 7MM CABLES USED AS TEST PORT EXTENSION CABLES ON TRANSMISSION REFLECTION AND S PARAMETER TEST SETS.  
TSA1818-24V IS A LOW VSWR (<-30 dB return loss) 24 INCH TYPE N CABLE  
PRODUCT SPECIFICATIONS APPLY AT 5 TO 99% (NON CONDENSING) RELATIVE HUMIDITY, CONSULT FACTORY FOR PRODUCT CHARACTERISTICS AT OTHER CONDITIONS.  
PRODUCT INFORMATION AVAILABLE ON OUR WEB PAGE @ <http://www.tensolite.com>



# Semi-Rigid Cable Assemblies

Tensolite's Semi-Rigid cable assemblies are among the highest quality assemblies available today. We custom build these cables to meet your specifications.

Tensolite uses only the highest quality MIL-spec Semi-Rigid cable ranging from .034" to .250" in diameter, and a wide variety of commercial, QPL, and custom connectors including Tensolite's own line of high performance connectors ranging from SMP's, SSMP's, SMA's, smk's, BMA's, TNC's and Type N's.

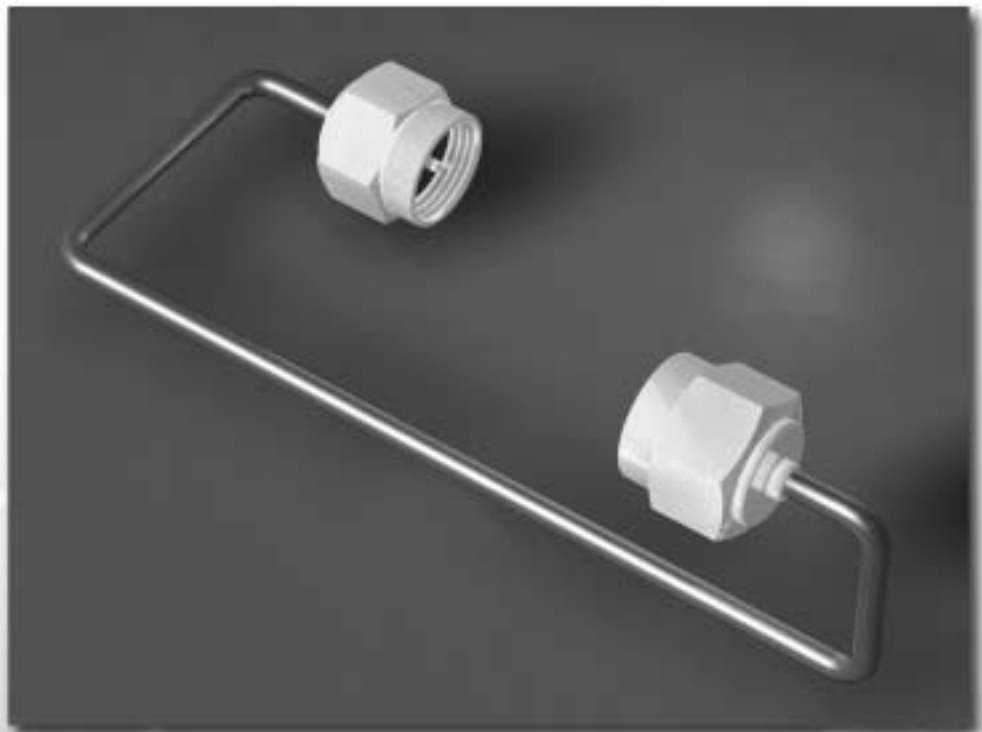
All soldering is done in a MIL-STD-2000 environment by certified assemblers. We maintain a MIL-I-45208A inspection system with the calibration, sampling procedures and documentation to meet your most demanding requirements.

## Applications:

- Military or commercial O.E.M.
- Test equipment
- High shielding environments
- Low cost RF transmission needs

## Features:

- Computerized forming equipment
- In-house test capability through 65 GHz
- Tight phase matching capability
- Custom marking
- Rapid delivery



# Delay Lines

Passive coax delay lines are an excellent means for providing short delays in RF and Microwave systems. Our engineers will work with you to configure a delay line solution that meets your specific electrical and packaging requirements.

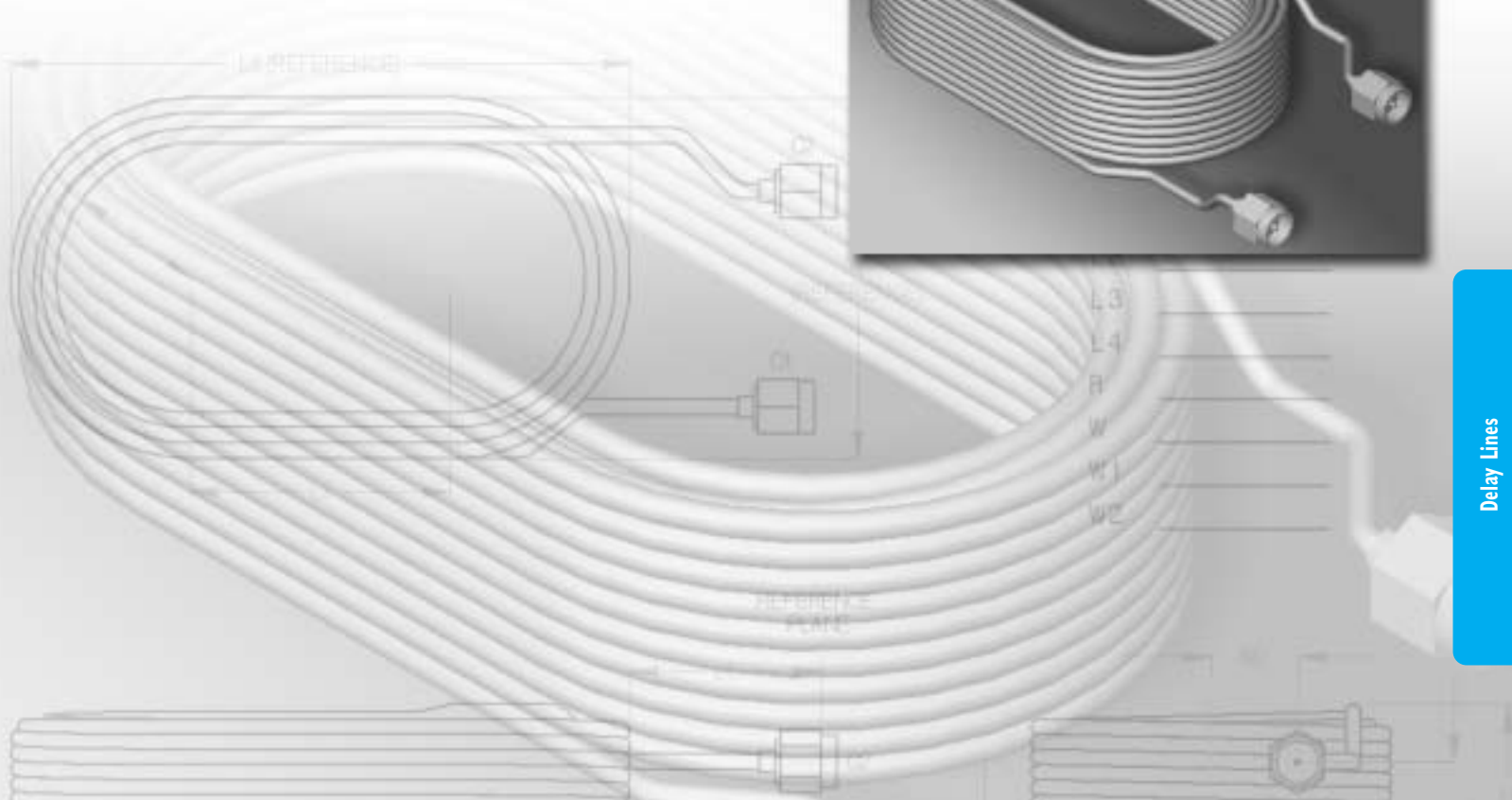
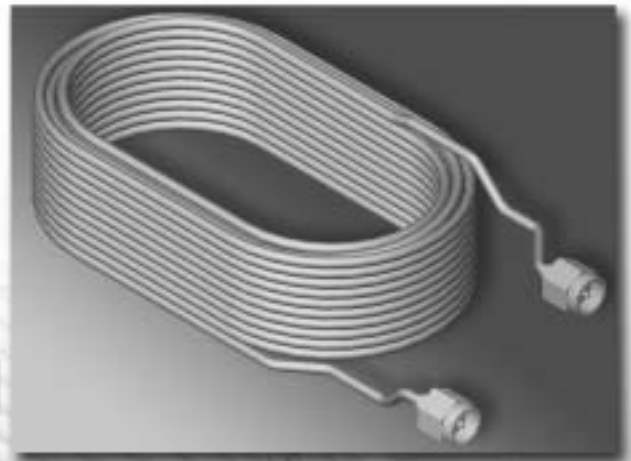
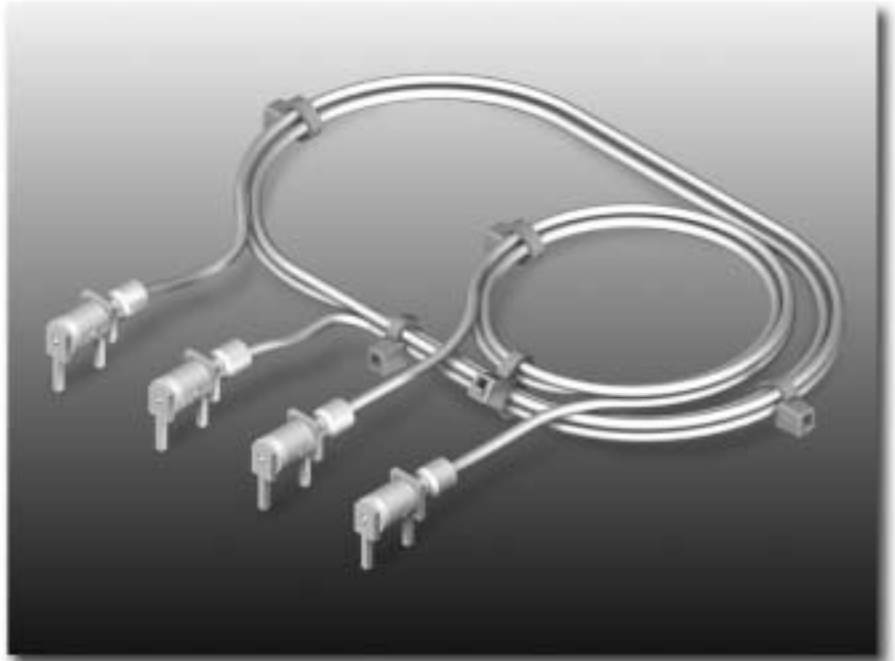
Tensolite uses the highest quality Semi-Rigid and Semi-Flex<sup>®</sup> cable in sizes ranging from .035" to .250" in diameter as well as a variety of flexible coax cables. A wide variety of terminations are available including stripped ends for direct PCB termination.

## Applications

- Land mobile radio
- Test equipment
- Cellular base stations

## Features:

- Delay and skew tolerances to less than 15 ps
- Excellent phase stability
- Multiple delays in one package
- Low loss and VSWR



Delay Lines

# Peltola Interconnect System

## Peltola, a reliable, proven interconnect system

The Tensolite Peltola connector system uses the coaxial cable's center conductor for direct insertion into a receptacle. A press-fit action captures the cable shield, thus eliminating the need for any soldering or special crimping. Each interconnect assembly includes a close tolerance coaxial cable terminated to a male Peltola connector.

The Peltola receptacle is a direct fit replacement for typical SMB-type circuit board mounted receptacles.

The resultant interconnection provides excellent electrical characteristics with a significant cost advantage over typical SMB-type installations.

The Peltola RF interconnect system, designed by Tektronix, Inc., has been proven in the manufacture of its oscilloscopes and other instruments. Tensolite maintains the close-tolerance RF coaxial cable used in PELTOLA assemblies, plus the automated termination equipment for applying the connector.

The PELTOLA assemblies are available in both 50  $\Omega$  and 75  $\Omega$  impedance versions. PELTOLA cables are available in four standard versions, As shown in Table 1. The PELTOLA connector is available with a machined eyelet that seals the end of the cable, further improving the VSWR of the connection.

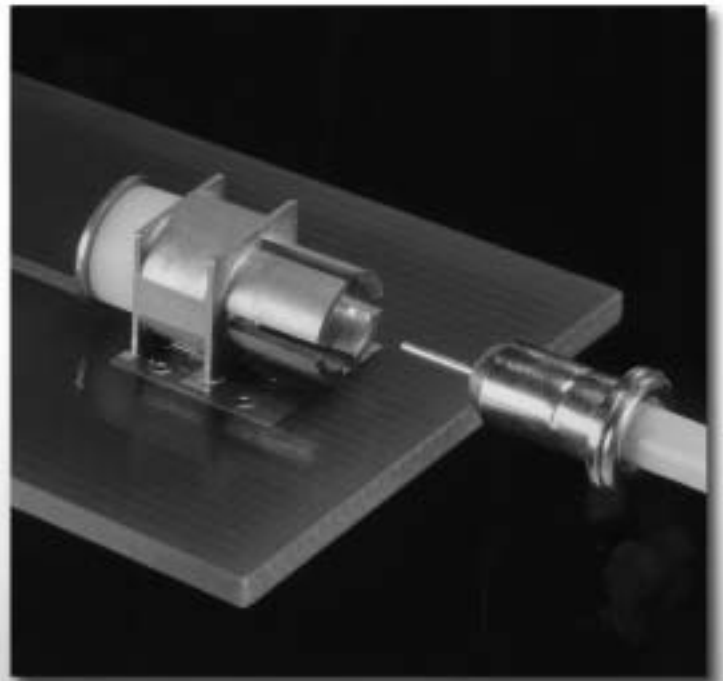
There are two PELTOLA receptacle choices, through-hole vertical mount and our NEW SMT right angle receptacle.

### PELTOLA to panel-mount BNC is available.

In addition to assemblies with PELTOLA connectors on both ends, Tensolite's production facility can custom manufacture cable assemblies with a PELTOLA connector on one end, and the connector of your choice on the other.

### Features:

- Offers a significant price advantage over typical assemblies
- VSWR compares very favorably with typical cable connectors
- Solderless connecting system, with 50 - 75 Ohm options
- SMT Right Angle Receptacle

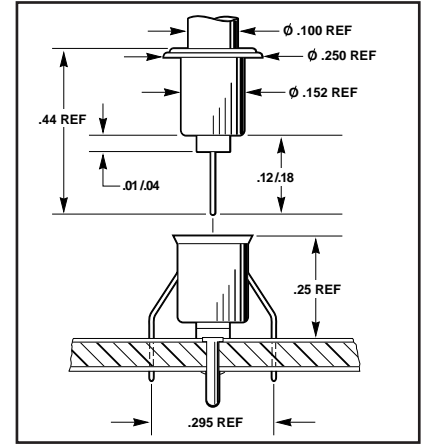


# Peltola Interconnect System Data/Specifications

The PELTOLA RF Interconnect System from Tensolite is a proven, low-cost, electrically clean, reliable way to make RF cable connections between circuit boards or to the back side panels.

## Electrical

Frequency:	DC - 3 Ghz
Nominal Impedance: Impedance:	50±5 Ohms 75±7.5 Ohms
VSWR Structural Return Loss	1.22:1 Maximum to 3 GHz >20 dB to 3 GHz
TDR	50 Ohm: 2.7 rho-picoseconds 75 Ohm: 2.2 rho-picoseconds



## Standard PELTOLA Cable

CABLE PART NO. & CENTER COND.	AWG & O/D (in.)	DIELECTRIC & O/D (Inches)	SHIELD & PCT. of COVERAGE	JACKET & NOM. O/D (INCHES)	NOM. CAP. PF/FT.	IMPEDANCE (Ohms)	CABLE RATING
178-1179-66 Solid, Silver coated, copper covered steel	25 .018	Solid Polyethylene .058	100% Al Polyester 86% TC Braid	Black PP.100	30.8	50±2	-15/+105°C 300V
175-1202-00 Solid, Silver coated, copper covered steel	25 .018	Solid Polyethylene .058	Tin-Coated Copper 88%	PVC .100	30.8	50±1	-15/+80°C 300V
816-0198-00 Solid, Silver coated, copper covered steel	25 .018	FEP PTFE .055	Tin-Coated Copper 88%	FEP PTFE .100	28.4	50±2	15/+150°C 300 V
174-4390-66 Solid, silver coated, Copper Covered Steel	27 .0142	Cellular Polyethylene .061	Tin-coated Copper 88%	PVC .100	17.4	75±3	-15/+80°C 90V

## Material

Inner Contact	Brass
Outer Contact	Brass
Receptacle	Brass
SMT	Brass

## Finishes

Inner Contact	Nickel/Gold Plate
Outer Contact	Nickel/Gold Plate
Receptacle	Nickel/Gold Plate
Receptacle	Nickel/Gold Plate

## Mechanical

Contact Resistance Center Conductor Shield	MIL-STD-202F Method 307 1.5 milliohms 1.5 milliohms
Insertion Force Withdrawal Force	MIL-STD-1344A Method 2013.1 Initial 5 lbs. Initial 3 lbs.

## Electrical

VSWR	Dependent upon length of the cable.
Typical VSWR for standard PELTOLA connector with 18" 50 ohm coax	Max 1.4 to 1 at 2 GHz
Typical VSWR for machined PELTOLA connector with 18" 50 ohm coax	Max 1.3 to 1 at 2 GHz

## Environmental

Temperature Cycling 55 to +75°C	MIL-STD-810D Method 501.2, 502.2 (combination)
Temperature Storage 85°C/30 day	MIL-STD-202 Method 108A
Humidity Test	MIL-STD-202F Method 106E
Humidity Sulfide	Connectors were subjected to 24 hours of Hydrogen Sulfide at concentration of 5-10 PPM
Vibration 0.05" displacement/ 10 to 55 Hz	MIL-STD-202F Method 201A
Shock 100 gs	MIL-STD-202 Method 202D





# Low-Loss Flexible (LLF) Series Cable

Cable P/N:	LLF-1087	LLF-1141	LLF-1250	LLF-1087-75	LLFP-1007S	LLFP-1141S	LLFP-1250S	HFF-1087
Cable Code:	461	463	465	837	561	563	565	794
<b>Conductor Construction:</b>	Solid SCCS	Solid SCCS	Solid SC	Solid SCCS	Stranded SCCS	Stranded SC	Stranded SC	Solid SCCS
<b>Conductor Diameter:</b>	0.020"	0.037"	0.064"	0.011"	0.021"	0.038"	0.068"	0.020"
<b>Dielectric Material:</b>	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
<b>Dielectric Diameter:</b>	0.064"	0.118"	0.211"	0.065"	0.063"	0.116"	0.211"	0.064"
<b>Shield Type(s):</b>						SC Strip + SC Braid		
<b>Shield Diameter:</b>	0.086"	0.142"	0.252"	0.087"	0.086"	0.140"	0.252"	0.086"
<b>Jacket Material:</b>	FEP	FEP	FEP	FEP	Polyurethane	Polyurethane	Polyurethane	FEP
<b>Jacket Diameter:</b>	0.105"	0.163"	0.270"	0.105"	0.115"	0.185"	0.290"	0.105"
<b>Weight(lb/ft):</b>	0.013	0.030	0.090	0.013	0.013	0.029	0.085	0.013
<b>Minimum Bend Radius(inches):</b>	0.5	0.8	1.4	0.5	0.6	0.9	1.5	0.5

**MECHANICAL CHARACTERISTICS:**

SCCS: Silver-coated Copper-covered

**ELECTRICAL CHARACTERISTICS:**

<b>Impedance(ohms):</b>	50	50	50	75	50	50	50	50
<b>Capacitance(pF/ft):</b>	29	29	29	20	29	29	29	29
<b>Velocity of Propagation(%):</b>	70	70	70	70	70	70	70	70
<b>Max. Operating Voltage(Vrms):</b>	1,500	1,900	3,000	900	1,500	1,900	3,000	1500
<b>Max. Operating Frequency(GHz):</b>	18	18	18	3	18	18	18	40
<b>Shielding Effectiveness(dB/ft):</b>	90	90	90	90	90	90	90	90
<b>Attenuation(dB/100') @ 0.4 GHz:</b>	13.7	7.2	4.2	13.7	14.6	7.7	4.2	13.7
<b>@ 1.0 GHz:</b>	22.2	11.6	7.2	22.2	23.4	12.6	7.6	22.2
<b>@ 3.0 GHz:</b>	38.9	21.2	13.9	38.9	41.6	22.6	15.2	38.9
<b>@ 5.0 GHz:</b>	51.0	28.3	18.9		54.6	30.5	24.8	51.0
<b>@ 10.0 GHz:</b>	74.9	43.0	29.6		79.6	45.8	34.4	74.9
<b>@ 18.0 GHz:</b>	104.3	61.5	44.3		110.6	65.3	47.5	104.3
<b>@ 26.5 GHz:</b>								128.7
<b>@ 40.0 GHz:</b>								176.5

# Low-Loss Flexible (LLF) Series Cable

Cable P/N:	LLFQ-1078A	LLFQ-1082AS	LLF-1105BS	LLF-1108BS	LLF-1170BS	LLF-2075AS	LLF-2170BS	LLF-4154	MFF-4182B
Cable Code:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	504	311
<b>Conductor Construction:</b>	Solid SCCS	Stranded SC	Stranded SC	Solid SC	Stranded SC	Stranded SC	Stranded SC	Solid SCCS	Solid SC
<b>Conductor Diameter:</b>	0.020"	0.024"	0.030"	0.030"	0.054"	0.019"	0.054"	0.037"	0.051"
<b>Dielectric Material:</b>	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
<b>Dielectric Diameter:</b>	0.061"	0.066"	0.080"	0.083"	0.142"	0.055"	0.144"	0.118"	0.145"
<b>Shield Diameter</b>	0.078"	0.082"	0.105"	0.108"	0.170"	0.074"	0.170"	0.154"	0.177"
<b>Jacket Material:</b>	PFA	PFA	FEP	FEP	FEP	FEP	FEP	FEP	FEP
<b>Jacket Diameter:</b>	0.095"	0.097"	0.118"	0.120"	0.187"	0.086"	0.190"	0.195"	0.195"
<b>Weight(lb/ft):</b>	0.010	0.010	0.016	0.016	0.038	0.009	0.035	0.040	0.037
<b>Minimum Bend Radius(inches):</b>	0.5	0.5	0.6	0.6	0.9	0.4	1.0	1.0	1.0

**MECHANICAL CHARACTERISTICS:**

**ELECTRICAL CHARACTERISTICS:**

<b>Impedance(ohms):</b>	50	50	50	50	50	50	50	50	50
<b>Capacitance(pF/ft):</b>	27	27	25	25	25	27	25	29	25
<b>Velocity of Propagation(%):</b>	77	77	82	82	82	77	82	70	82
<b>Max. Operating Voltage(Vrms):</b>	800	800	800	800	1,000	700	1,000	1,400	1,000
<b>Max. Operating Frequency(GHz):</b>	18	18	18	18	18	18	18	18	26.5
<b>Shielding Effectiveness(dB/ft):</b>	90	90	90	90	90	75	75	90	4.7
<b>Attenuation(dB/100') @ 0.4 GHz:</b>	12.4	12.8	11.5	8.5	5.3	19.1	6.3	7.5	7.6
<b>@ 1.0 GHz:</b>	19.5	20.2	18.5	13.1	8.5	32.2	10.3	12.4	13.4
<b>@ 3.0 GHz:</b>	34.5	35.7	33.5	22.9	15.0	59.0	18.9	22.5	17.5
<b>@ 5.0 GHz:</b>	45.1	46.6	43.6	29.9	19.6	77.7	25.2	31.0	26.9
<b>@ 10.0 GHz:</b>								46.8	36.2
<b>@ 18.0 GHz:</b>								68.6	46.6
<b>@ 26.5 GHz:</b>									

# MIL-C-17 Flexible Coaxial Cables

Spec Reference:	MT703-RG303	MT760-RG142	MT775-RG214	MT784-RG223	MT793-RG178	MT7111-RG303	MT7113-RG316	MT7127-RG393	MT7129-RG400	MT7152-00001
Cable Code:	115	132	162	174	140	N/A	187	N/A	190	195
<b>MECHANICAL CHARACTERISTICS:</b>										
Conductor Construction:	Stranded TC	Solid SCCS	Stranded SC	Solid SC	Stranded SCCS	Solid SCCS	Stranded SCCS	Stranded SC	Stranded SC	Stranded SCCS
Conductor Diameter:	0.036"	0.037"	0.089"	0.035"	0.012"	.037"	0.020"	0.094"	0.038"	0.020"
Dielectric Material:	Polyethylene	PTFE	Polyethylene	Polyethylene	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Dielectric Diameter:	0.116"	0.116"	0.285"	0.116"	0.033"	0.116"	0.060"	0.285"	0.116"	0.060"
Shield Type(s):	1 TC-Braid	2 SC-Braids	2 SC-Braids	2 SC-Braids	1 SC-Braid	1 SC-Braid	1 SC-Braid	2 SC-Braids	2 SC-Braids	2 SC-Braids
Shield Diameter:	0.138"	0.160"	0.341"	0.160"	0.051"	0.138"	0.075"	0.341"	0.162"	0.096"
Jacket Material:	PVC	FEP	PVC	PVC	FEP	FEP	FEP	FEP	FEP	FEP
Jacket Diameter:	0.195"	0.195"	0.425"	0.212"	0.071"	0.170"	0.065"	0.390"	0.195"	0.114"
Weight(lb/ft):	0.026	0.043	0.134	0.037	0.006	0.030	0.010	0.160	0.042	0.015
Minimum Bend Radius(inches):	1.0	1.0	2.1	1.1	0.4	0.7	0.5	2.0	1.0	0.6

SCCS: Silver-coated Copper-covered Steel; SC: Silver-coated Copper; TC: Tin-coated Copper

## ELECTRICAL CHARACTERISTICS:

Impedance(ohms):	50	50	50	50	50	50	50	50	50	50
Capacitance(pF/ft):	31	29	31	31	29	29	29	29	29	29
Velocity of Propagation(%):	66	70	66	66	70	70	70	70	70	70
Max. Operating Voltage(Vrms):	1,400	1,400	3,700	1,400	750	1,400	900	1,875	1,400	900
Max. Operating Frequency(GHz):	1	8	11	12	3	3	3	11	12.4	12.4
Shielding Effectiveness(dB/ft):	40	60	60	60	40	40	40	60	60	60
Attenuation(dB/100') @ 0.4 GHz:	9.7	9.0	5.0	9.3	30.4	8.5	16.1	5.0	8.6	15.9
@ 1.0 GHz:	17.1	15.3	8.7	15.6	49.8	14.1	26.8	15.4	14.5	25.7
@ 3.0 GHz:		29.2	18.8	28.7	93.2	27.0	51.5	17.8	27.1	47.1
@ 5.0 GHz:		40.3	27.7	40.9				25.1	36.8	62.4
@ 10.0 GHz:			48.0	69.3				41.1	56.8	92.4



# MIL-C-17 Semi-Rigid Coaxial Cables

MECHANICAL AND ELECTRICAL SPECIFICATIONS OF POPULAR MIL-C-17 SEMI-RIGID CABLES @ AMBIENT

M17# or other#	Nom. O.D. (Inches)	Operating Frequency		Power Handling @Max MIL Spec Freq. (Watts)	Maximum Attenuation (db/100 FT)						Dielectric Material	Jacket Material	Center Conductor Material	Minimum Inside Bend Radius (Inches)	Continuous Working Voltage	Withstanding Voltage (RMS)	Operating Temp. Range(°C)	
		MIL Spec. Max.	90% Cut Off		500 MHz	1 GHz	3 GHz	5 GHz	10 GHz	18 GHz								20 GHz
/151- 00001	.047	20	109	6.5	28	40	70	90	130	180	190	PTFE	COPPER	SPCW*	.125	1000	2000	-40 to +100
/133- RG405 & /133- 00006*	.065	20	61	20	15	22	36	50	80	122	130	PTFE	COPPER	SPCW*	.125	1500	5000	-40 to +125
/130- RG402 & /130 00004*	.141	20	34	70	8	12	21	29	45	62	70	PTFE	COPPER	SPCW*	.250	1900	5000	-40 to +125
/129- RG401	.250	18	19	200	5.1	7.5	11	16	33	48		PTFE	COPPER	SPC**	3000	7500	-40 to +80	

Follow these guidelines for the best performing lowest cost and shortest lead time assemblies:

- A. DIMENSIONS**  
Drawing layout should be in absolute XYZ format with one connector interface reference plane the 0,0 point from which all subsequent measurements are made. This eliminates a build up of tolerances.
- B. TOLERANCES**  
0-4" lengths: ±0.03  
4-12" lengths: ±0.05  
>12" lengths: ±(0.05) x (length)  
Example: A cable with two bends and three legs 3", 5", and 10" long would have leg tolerances of ±.03", ±.05", and ±.09" respectively. The furthest end of the 10" leg length is 18" from the 0,0,0 point.
- C. BENDS**  
For best performance do not exceed the minimum inside bend radii specified in the table above. To allow optimum use of computerized forming equipment and eliminate tooling:  
1. Use the same radius dimension within a given assembly.  
2. Do not specify a radius greater than 0.5".  
3. Allow a minimum .150" of straight cable between bends.
- D. MARKERS**  
Use commonly available MIL spec or commercial shrink marker material in high contrast black with white characters, two lines/marker maximum. Wrap markers are less costly on small quantity, quick delivery orders. Avoid serialization and one-of-a-kind markers.
- E. CONNECTORS**  
Specify SMA plugs whenever possible. Tensolite's SMA's easily out perform most SMA's available today. Avoid unusual connector designs as well as unpopular items such as bulkheads or panel mounts. Allow "equivalents" to increase the probability of availability or lower costs.  
Other cable assemblies and material plating options exist. Contact Tensolite for more information.
- F. CABLE**  
Semi-rigid cable is available in standard as well as soft copper outer jackets. One may choose from a wide assortment of jacket and center conductor platings. A selection of the more popular options are listed above. If no requirement other than O.D. is specified, Tensolite uses soft jacketed, steel center conductor cable.
- G. DRAWINGS**  
Ensure drawings are complete with all dimensions, views, materials, tolerances, proper scale, electrical and environmental requirements. Obtain from Tensolite a special part number uniquely assigned to your print before releasing the final document.
- H. PACKAGING**  
Unless otherwise specified cables are individually sealed in plastic bags, wrapped in wadding and sealed in heavy duty outer containers to prevent damage during shipping.  
**Remember, these are just guidelines. If you must exceed them consult Tensolite for more information.**

\*Silver plated copper clad steel.  
\*\*Silver plated copper.

# Acculite UT (Ultra Thin)

## Miniaturized, lightweight PTFE insulated lead wire

Tensolite ACCULITE - UT wire is a series of lightweight, smaller diameter lead wire for applications requiring thinner wall thickness' and smaller conductor sizes. Standard wall thickness' range from .0015 inches to .0040 inches.

### Typical Applications for ACCULITE - UT are:

- \* Subminiature Thermocouple leads
- \* Test Equipment Wiring
- \* Miniature slip ring and gyroscope
- \* Miniature brush block assemblies
- \* Strain gauge and transducer leads
- \* Medical Equipment
- \* Tone arm and hearing aid wire
- \* Micro component interconnect wiring
- \* Radio and Television circuitry
- \* Telemetry equipment
- \* Aerospace and Missile instrumentation

TENSOLITE PRODUCT CODE	AWG Silver Plated Copper	Dielectric Material	Nominal wall Thickness	Finished Diameter Min/Max	Max D.C. Resistance Ohms/ 1000ft. @ 20 °C	Nominal Weight/ 1000 ft
S26UT	26 (1/26)	PTFE	.0040	.022 / .025	42.1	1.000
S28UT	28 (1/28)	PTFE	.0035	.018 / .021	66.4	0.650
S736UT	28 (7/36)	PTFE	.0040	.021 / .025	62.0	0.768
S30UT	30 (1/30)	PTFE	.0030	.015 / .017	102.0	0.430
S738UT	30 (7/38)	PTFE	.0040	.018 / .022	97.8	0.573
S32UT	32 (1/32)	PTFE	.0030	.013 / .015	166.0	0.290
S740UT	32 (7/40)	PTFE	.0040	.015 / .020	166.0	0.379
S34UT	34 (1/34)	PTFE	.0025	.010 / .012	270.0	0.190
S742UT	34 (7/42)	PTFE	.0035	.014 / .016	258.0	0.261
S36UT *	36 (1/36)	PTFE	.0015	.007 / .009	850.0	0.105
S744UT *	36 (7/44)	PTFE	.0035	.012 / .015	630.0	0.200

\*Manufactured with silver-plated copper alloy conductor

#### UT Performance:

Operating Voltage: 100 Vrms, 60 Hz, or 300 Vdc, Max.

Operating Temperature: -90 °C to 200 °C

Colors Available: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White

**\*NOTE: ACCULITE IS A TRADE NAME OF THE TENSOLITE COMPANY.**



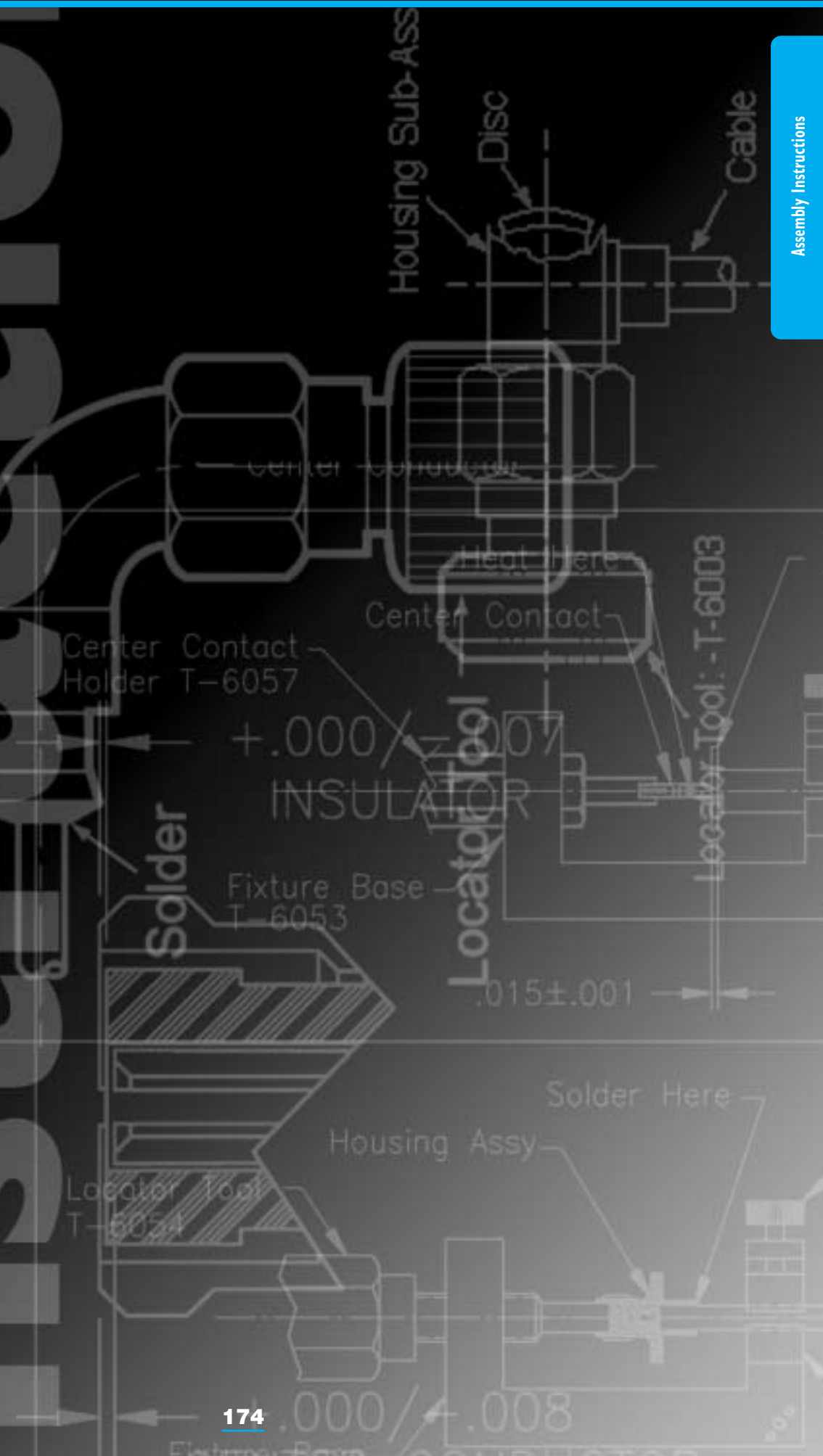


# Assembly Instructions

CONDUCTOR  
Conductor over cable  
and seat firmly  
using gauge and solder.

TO HOUSING  
onto cable, place  
soldering fixture, then  
to seat firmly

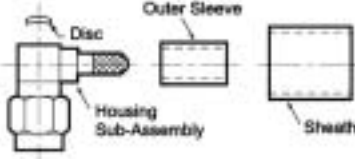
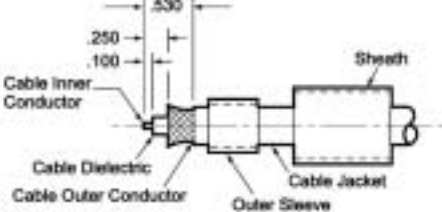
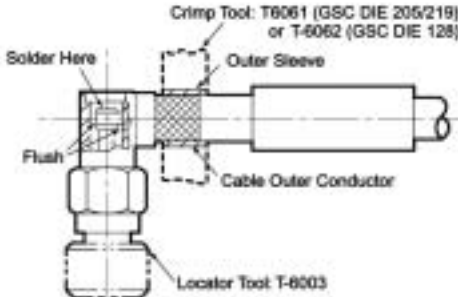
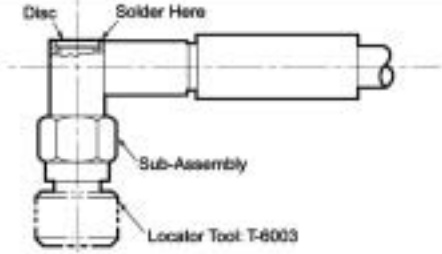
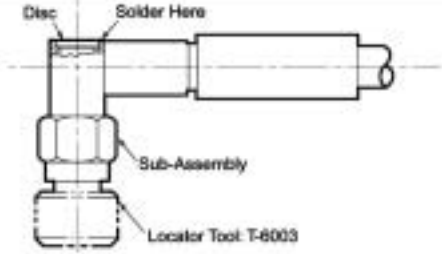
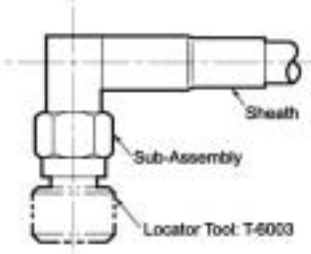
over nose of locator  
place.



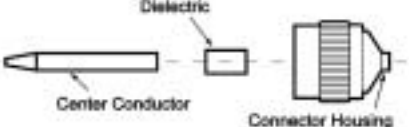
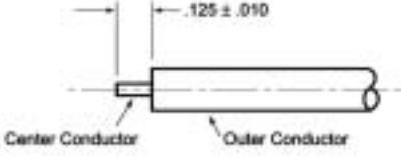
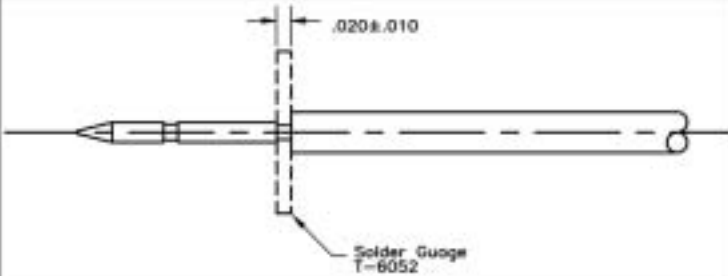
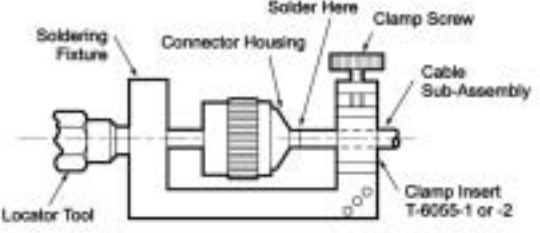
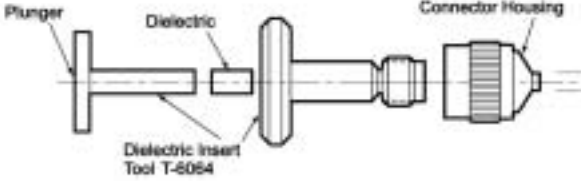
# Assembly Instructions

Part Number	Connector Type	Assy Inst. No. (AI)	Page
5161	SMA female radius right angle cable solder	AI-103 & AI-104	178, 179
5225,5224	SMA female, two or four hole flange solder	AI-120	195
5228,5229	SMA female straight direct solder -5CC	AI-132	201
5235-1	SMA female radius right angle solder	AI-118	193
5235-2	SMA female radius right angle cable solder	AI-122	197
5236	SMA male radius right angle cable solder	AI-105 & AI-106	180, 181
5285	SMA male straight connector solder	AI-111	186
5228,5229	SMA female straight direct solder	AI-113	188
5286,5289			
5317	SMA straight male connector direct solder	AI-222	206
5319	SMA straight male connector direct solder	AI-123	198
5720	SMA female straight connector solder or crimp	AI-109	184
5721	SMA female straight connector solder or crimp	AI-110	185
5730	SMA male straight connector solder or crimp	AI-107 & AI-108	182, 183
5750	SMA male radius right angle crimp or solder	AI-116	191
5752	SMA female radius right angle cable clamp	AI-121	196
5785, 5787	SMA connector receptacle 2 hole flange	AI-224	208
5790, 5794	SMA connector receptacle 2 hole flange	AI-224	208
5810, 5824	SMA connector receptacle 4 hole flange	AI-224	208
5850	SMA male miter right angle connector solder	AI-124	199
5851	SMA male miter right angle crimp or solder	AI-101	176
5999	SMA male straight Phase adjustable	AI-178 & 179	204, 205
8009	Type N male straight solder	AI-102	177
8009	Type N male connector solder	AI-125	200
8010	Type N female direct solder	AI-114	189
8011	Type N female bulkhead feedthrough direct solder	AI-115	190
8012	Type N female flange mount direct solder	AI-112	187
8041	Type N male straight solder or crimp	AI-119	194
9011	TNC female bulkhead feedthrough	AI-136	202
9012	TNC female flange mount	AI-136	202
9031	TNC female radius right angle direct solder	AI-117	192
P651	SMP female straight solder on contact	AI-292	210
P651	SMP female straight solder on contact	AI-300	213
P652	SMP female right angle captivated contact	AI-291	209
P652	SMP female right angle captivated contact	AI-301	214
P655	SMP male straight captivated contact	AI-311	223
P655	SMP male straight captivated contact	AI-312	224
P657	SMP female straight to flex cable	AI-365	234
P658	SMP female float mount to flex cable	AI-297	212
P659	SMA female radius right angle captivated contact solder	AI-307	219
P659	SMP female right angle captivated contact	AI-308	220
P660	SMP male straight captivated contact	AI-309	221
P660	SMP male straight captivated contact	AI-310	222
P661	SMP male straight to flex cable	AI-334	231
P662	SMP female straight solder on contact	AI-313	225, 226
P662	SMP male straight solder on contact	AI-314	220, 221
P664	SMP male straight 2 hole flange solder on	AI-315	229
P664	SMP male straight 2 hole flange solder on	AI-316	230
P666	SMP female float mount solder on	AI-364	233
P670, P671, P672, P673	Shroud installation	AI-305	217
P674	SMP male captivated contact thread-in	AI-359	232
P676	Thread in attachment	AI-306	218
P680	SMP male hermetic	AI-293	211
P681	SMP male hermetic	AI-302	215
P682	SMP male hermetic	AI-303	216
P794	SMP male hermetic	AI-367	235

# Assembly Instructions AI-101

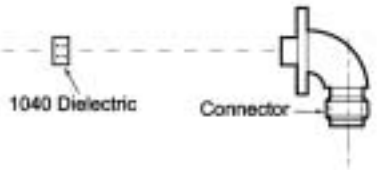
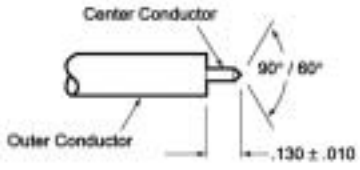
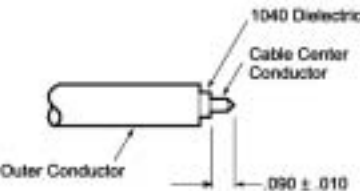
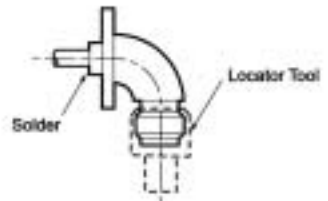
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMA male miter right angle crimp or solder attachment	-1 RG 55, 58, 141, 142, 223, 303, 400 -2 RG 174, 188, 316, 179, 187		Locator Tool: Tensolite-T-6003 Crimp Tool: Tensolite-T-6061 (GSC DIE 205/219) FOR-1 or Tensolite-T-6062 (GSC DIE 128) FOR-2	Tensolite-5851-1CC Tensolite-5851-1CCSF Tensolite-5851-2CC Tensolite-5851-2CCSF
<b>Procedure 1</b>	<b>Prepare Coaxial Cable</b> 1. Trim cable jacket, outer conductor and dielectric to dimensions shown. 2. Place sheath and outer sleeve on cable. 3. Flare outer conductor.			
<b>Procedure 2</b>	<b>Attach Cable Center Conductor to Housing</b> 1. Attach locator tool to housing. 2. Place housing in a vise. 3. Insert cable into housing and position center conductor and dielectric of cable as shown. 4. Place soldering iron on tip of housing center conductor and solder.			
<b>Procedure 3</b>	<b>Attach Cable Outer Conductor to Housing</b> 1. Slide outer sleeve over flared outer conductor. 2. Crimp or solder outer sleeve.			
<b>Procedure 4</b>	<b>Seal Opening in Housing</b> 1. Press disc into opening in rear of housing sub-assembly. Option 1: Tin perimeter of opening and press disc into position; apply heat to cap, do not allow solder to penetrate housing. Option 2: Disc may be epoxied into place. Do not allow epoxy to penetrate inside housing.			
<b>Procedure 5</b>	<b>Shrink Sheath to Cable</b> 1. Position sheath over outer sleeve as shown. 2. Apply indirect heat with thermo gun to shrink sheath. 3. Remove locator tool.			

# Assembly Instructions AI-102

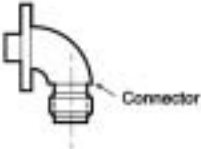
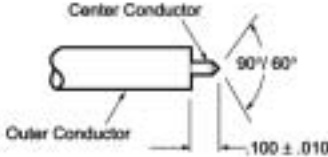
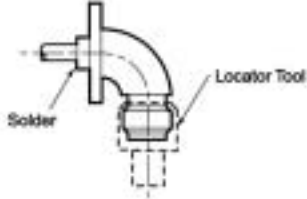
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>Type N male straight solder attachment</p>	<p>-1 .141 semi-rigid -2 .085 semi-rigid -3 .141 micro-porous</p>		<p>Locator Tool: Tensolite-T-6066 Soldering Fixture: Tensolite-T-6053 Clamp Inserts: Tensolite-T-6055-1 or -2 Soldering Gauge: Tensolite-T-6052</p>	<p>Tensolite-8009-1SF Tensolite-8009-2SF Tensolite-8009-3SF</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.</p>			
<p><b>Procedure 2</b></p>	<p><b>Attach Center Conductor to Cable</b> 1. Slide center conductor over center conductor of cable and seal firmly against soldering gauge and solder.</p>			
<p><b>Procedure 3</b></p>	<p><b>Solder of Connector Housing to Cable</b> 1. Place connector housing on end of cable. 2. Place house assembly in solder fixture as shown. 3. Slide housing over locator tool. 4. Maintain position of housing firmly against locator tool and solder.</p>			
<p><b>Procedure 4</b></p>	<p><b>Insert Dielectric</b> 1. Attach dielectric insert tool to connector. 2. Insert dielectric and push firmly with plunger until flange bottoms on tool shoulder.</p>			



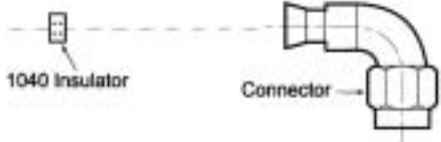
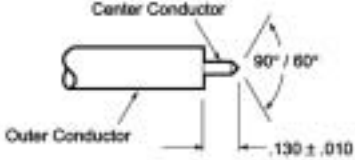
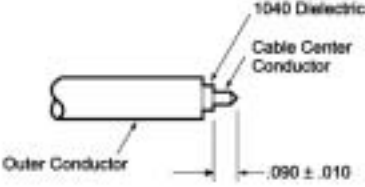
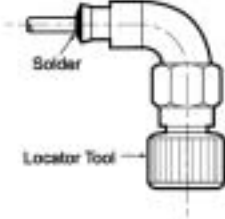
# Assembly Instructions AI-103

<b>Connector Type</b>  SMA female radius right angle cable solder attachment	<b>Cable Type</b>  .141 semi-rigid	<b>Connector Components</b>  	<b>Tools Required</b>  Locator Tool: Tensolite-T-6002-2	<b>Connector P/N</b>  Tensolite-5161-1 Tensolite-5161-1SF Tensolite-5161-1CC Tensolite-5161-1CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown. 2. Point center conductor as shown.			
<b>Procedure 2</b>	<b>Install 1040 Dielectric</b> 1. Slide 1040 dielectric over conductor flush against cable.			
<b>Procedure 3</b>	<b>Attach Cable to Connector</b> 1. Screw on locator tool to connector. 2. Plug cable into connector and bottom. 3. Solder. 4. Remove locator tool.			

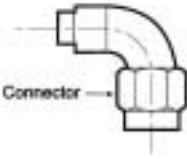
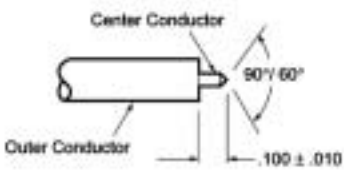
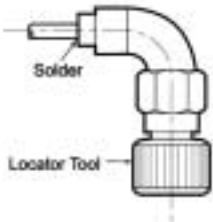
# Assembly Instructions AI-104

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMA female radius right angle cable solder attachment</p>	<p>.085 semi-rigid</p>		<p>Locator Tool: Tensolite-T-8002-2</p>	<p>Tensolite-5161-2 Tensolite-5161-2SF Tensolite-5161-2CC Tensolite-5161-2CCSF</p>
<p><b>Procedure</b></p> <p><b>1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Trim outer conductor and dielectric to dimension shown.</li> <li>2. Point center conductor as shown.</li> </ol>			
<p><b>Procedure</b></p> <p><b>2</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>1. Screw on locator tool to connector.</li> <li>2. Plug cable into connector and bottom.</li> <li>3. Solder.</li> <li>4. Remove locator tool.</li> </ol>			

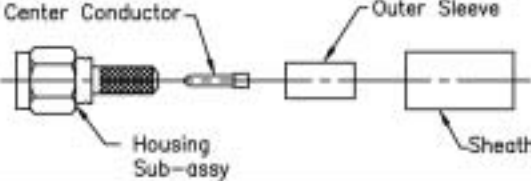
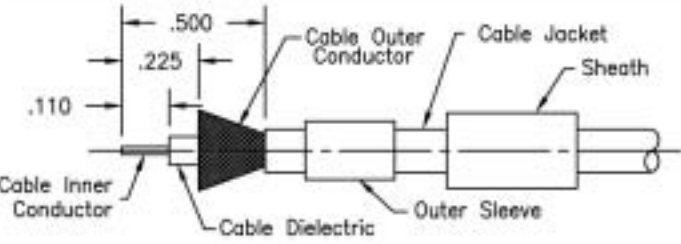
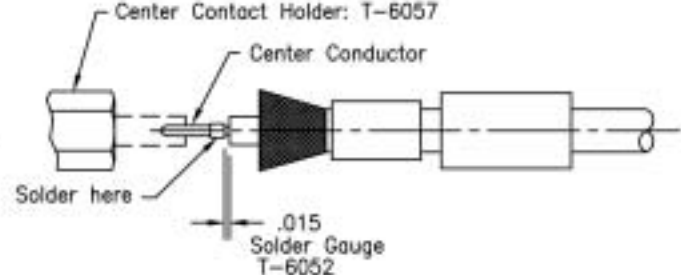
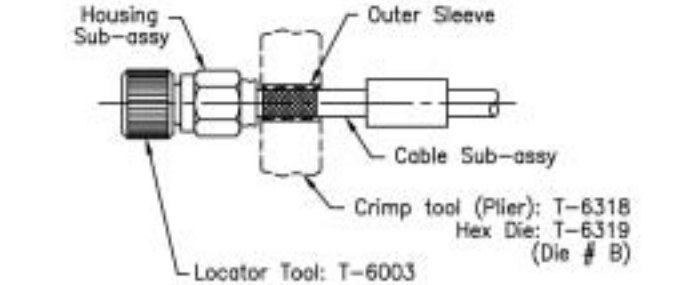
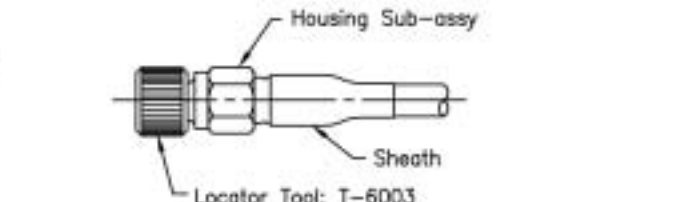
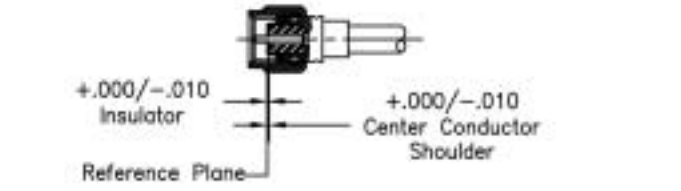
# Assembly Instructions AI-105

<b>Connector Type</b>  SMA male radius right angle cable solder attachment	<b>Cable Type</b>  .141 semi-rigid	<b>Connector Components</b>  	<b>Tools Required</b>  Locator Tool: Tensolite-T-6003	<b>Connector P/N</b>  Tensolite-5236-1 Tensolite-5236-1CC Tensolite-5236-1SF Tensolite-5236-1CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown. 2. Point center conductor as shown.			
<b>Procedure 2</b>	<b>Install 1040 Dielectric</b> 1. Slide 1040 insulator over conductor flush against cable.			
<b>Procedure 3</b>	<b>Attach Cable to Connector</b> 1. Screw on locator tool to connector. 2. Plug cable into connector and bottom. 3. Solder. 4. Remove locator tool.			

# Assembly Instructions AI-106

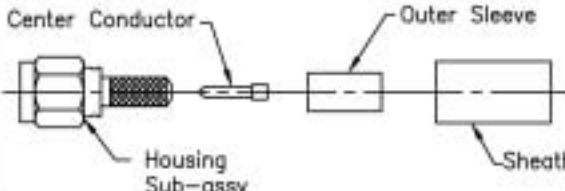
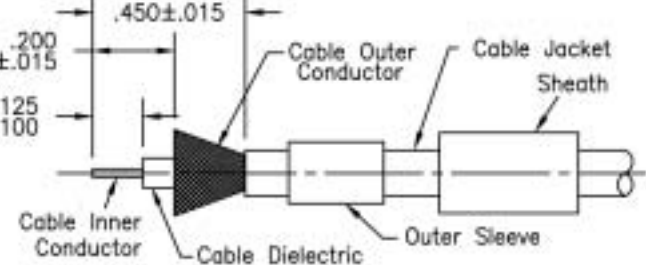
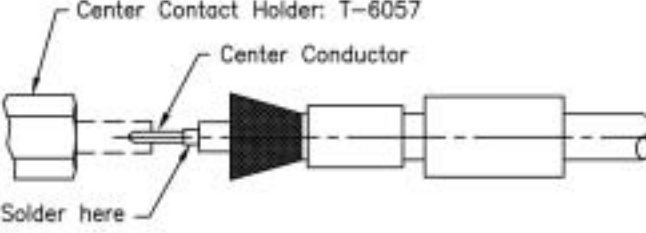
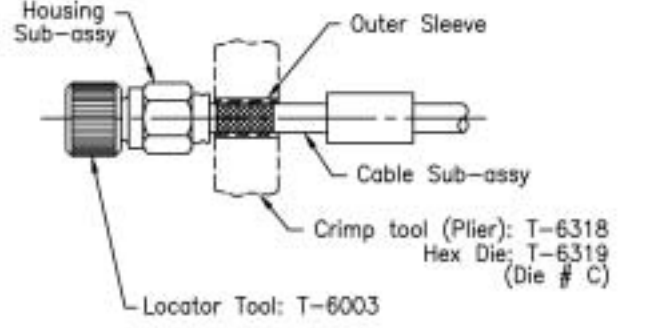
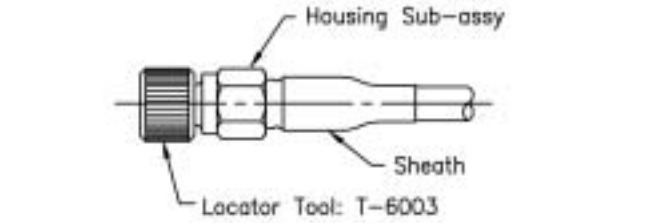
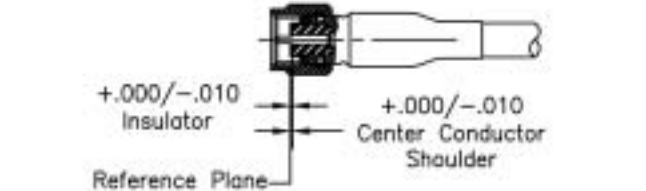
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMA male radius right angle cable solder attachment</p>	<p>.085 semi-rigid</p>		<p>Locator Tool: Tensolite-T-6003</p>	<p>Tensolite-5236-2 Tensolite-5236-2CC Tensolite-5236-2SF Tensolite-5236-2CCSF</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Trim outer conductor and dielectric to dimension shown.</li> <li>2. Point center conductor as shown.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Attach Cable to Conductor</b></p> <ol style="list-style-type: none"> <li>1. Screw on locator tool to connector.</li> <li>2. Plug cable into connector and bottom.</li> <li>3. Solder.</li> <li>4. Remove locator tool.</li> </ol>			

# Assembly Instructions AI-107

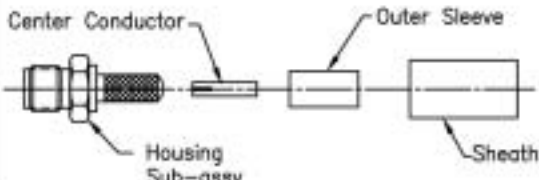
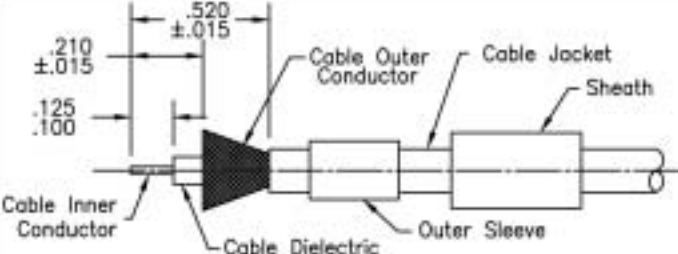
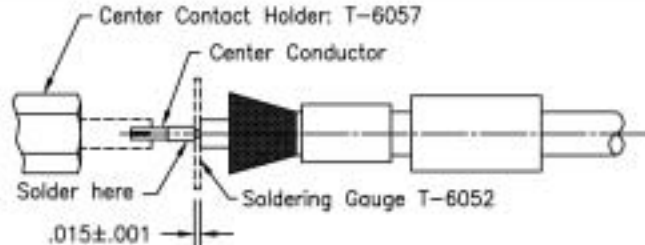
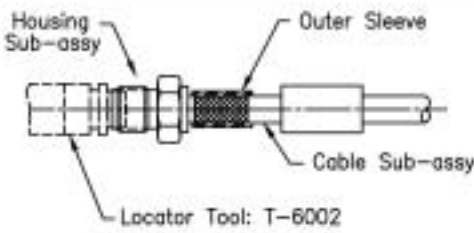
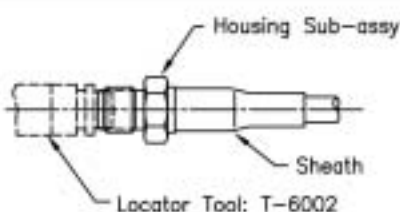
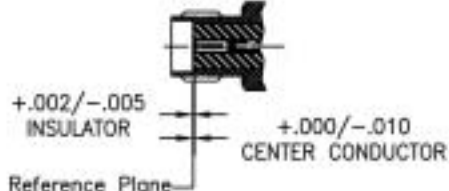
Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
SMA Male straight connector solder and crimp attachment	141, 142, 223, 303, 400		C/C Holder: Crimp Tool (Plier): Locator Tool: Solder Gauge: Hex Die: Die Change Tool:	T-6057 T-6318 T-6003 T-6052 T-6319 T-6320	5730-1 5730-1SF
<b>Procedure 1</b>	<b>Prepare Coaxial Cable End</b> <ol style="list-style-type: none"> <li>Trim cable jacket, outer conductor and dielectric to dimensions shown.</li> <li>Place sheath and outer sleeve on cable.</li> <li>Flare outer conductor.</li> </ol>				
<b>Procedure 2</b>	<b>Solder Center Contact to Cable Inner Conductor</b> <ol style="list-style-type: none"> <li>Tin inner conductor.</li> <li>Place center contact in holder.</li> <li>Heat center contact with soldering iron and carefully push it over inner conductor to rest firmly against soldering gauge.</li> <li>Remove excess solder or splatter.</li> </ol>				
<b>Procedure 3</b>	<b>Attach Cable to Housing Sub-Assy</b> <ol style="list-style-type: none"> <li>Attach locator tool to housing.</li> <li>Place housing in a vise.</li> <li>Insert cable into housing and seat firmly.</li> <li>Slide outer sleeve over outer conductor and crimp on solder in place.</li> </ol>				
<b>Procedure 4</b>	<b>Shrink Sheath to Cable</b> <ol style="list-style-type: none"> <li>Position sheath over outer sleeve as shown</li> <li>Apply indirect heat with thermo gun to shrink sheath.</li> <li>Remove locator tool.</li> </ol>				
<b>Procedure 5</b>	<b>Inspect Completed Assembly</b> <ol style="list-style-type: none"> <li>Adherence to assembly steps given should yield tolerances shown.</li> </ol>				



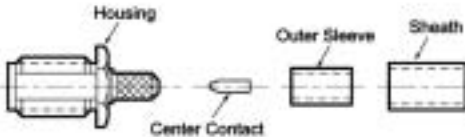
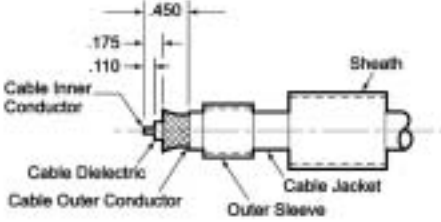
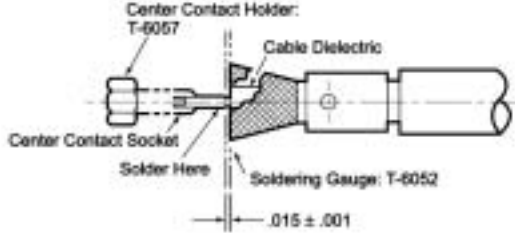
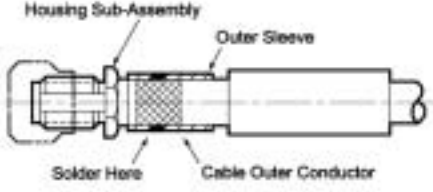
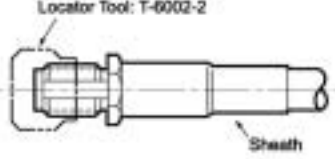
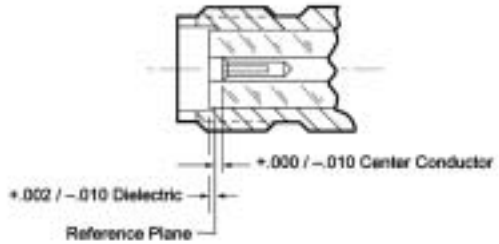
# Assembly Instructions AI-108

<b>Connector Type</b> SMA Male straight connector solder and crimp attachment	<b>Cable Type</b> RG: 174, 179, 187, 188, 316	<b>Connector Components</b> 	<b>Tools Required</b> C/C Holder: Crimp Tool (Plier): Locator Tool: Hex Die: Die Change Tool:	<b>P/N</b> T-6057 T-6318 T-6003 T-6319 T-6320	<b>Connector P/N</b> 5730-2 5730-2SF
<b>Procedure 1</b>	<b>Prepare Coaxial Cable End</b> 1. Place sheath and outer sleeve on cable. 2. Remove end portion of cable jacket to expose cable outer conductor. 3. Trim outer conductor to length. 4. Trim cable dielectric to length. 5. Trim inner conductor to length. 6. Flare outer conductor.				
<b>Procedure 2</b>	<b>Solder Center Contact to Cable Inner Conductor</b> 1. Tin inner conductor. 2. Place center contact in holder. 3. Heat center contact with soldering iron and carefully push it over inner conductor to rest firmly against cable dielectric. 4. Remove excess solder or splatter.				
<b>Procedure 3</b>	<b>Crimp Cable to Inner Sleeve</b> 1. Secure locator tool to threads of housing sub-assembly. 2. Position and secure housing sub-assembly in a small bench vise. 3. Insert cable into housing sub-assembly and seat firmly. 4. Slide outer sleeve over flared portion of outer conductor. 5. Hold cable firmly seated and crimp outer sleeve in place. 6. Trim and remove excess outer conductor strands				
<b>Procedure 4</b>	<b>Shrink Sheath to Cable</b> 1. Position sheath over outer sleeve as shown. 2. Apply indirect heat with thermo gun to shrink sheath. 3. Remove locator tool.				
<b>Procedure 5</b>	<b>Inspect Completed Assembly</b> 1. Adherence to assembly steps given should yield tolerances shown.				

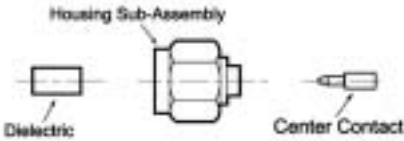
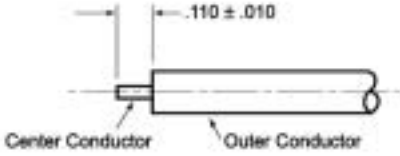
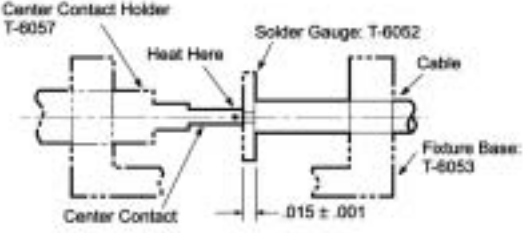
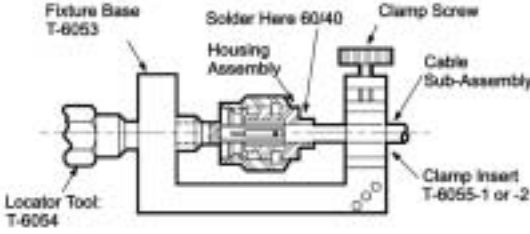
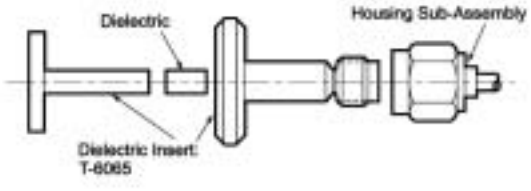
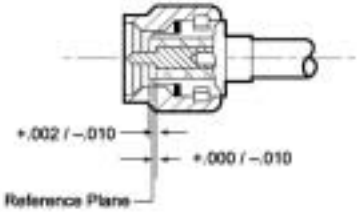
# Assembly Instructions AI-109

<b>Connector Type</b> SMA Female straight connector solder or crimp attachment	<b>Cable Type</b> -1RG: 55/U, 58, 141, 142, 223, 303, 400 -2RG: 174, 179, 187, 188, 316	<b>Connector Components</b> 	<b>Tools Required</b> C/C Holder: Solder Gauge: Locator Tool:	<b>P/N</b> T-6057 T-6052 T-6002-2	<b>Connector P/N</b> 5720-1 5720-1SF 5720-2 5720-2SF
<b>Procedure 1</b>	<b>Prepare Coaxial Cable End</b> 1. Place sheath and outer sleeve on cable. 2. Remove end portion of cable jacket to expose cable outer conductor. 3. Trim outer conductor to length. 4. Trim cable dielectric to length. 5. Trim inner conductor to length. 6. Flare outer conductor.				
<b>Procedure 2</b>	<b>Solder Center Contact to Cable Inner Conductor</b> 1. Tin inner conductor. 2. Place center contact in holder. 3. Heat center contact with soldering iron and carefully push it over inner conductor to rest firmly against soldering gauge. 4. Remove excess solder or splatter.				
<b>Procedure 3</b>	<b>Crimp Cable to Inner Sleeve</b> 1. Secure locator tool to threads of housing sub-assembly. 2. Position and secure housing sub-assembly in a small bench vise. 3. Insert cable into housing sub-assembly and seat firmly. 4. Slide outer sleeve over flared portion of outer conductor. 5. Hold cable firmly seated and crimp outer sleeve in place. 6. Trim and remove excess outer conductor strands				
<b>Procedure 4</b>	<b>Shrink Sheath to Cable</b> 1. Position sheath over outer sleeve as shown. 2. Apply indirect heat with thermo gun to shrink sheath. 3. Remove locator tool.				
<b>Procedure 5</b>	<b>Inspect Completed Assembly</b> 1. Adherence to assembly steps given should yield tolerances shown.				

# Assembly Instructions AI-110

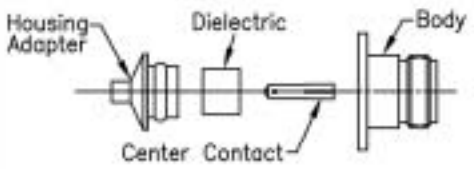
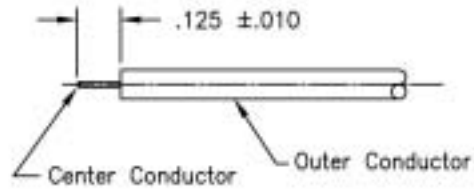
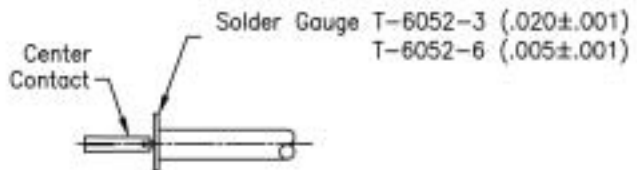
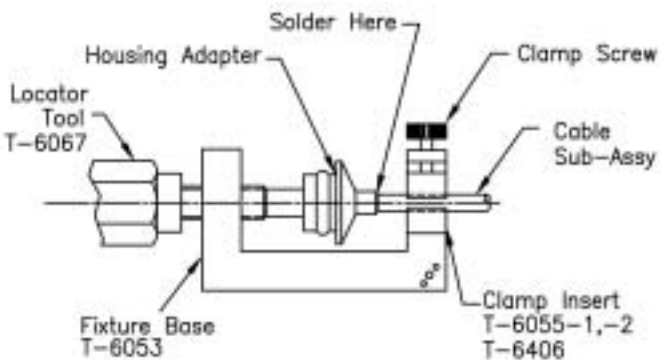
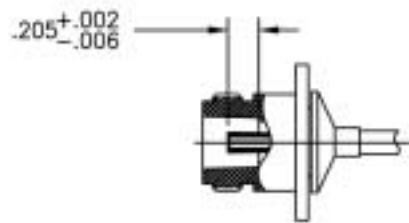
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMA female straight connector solder or crimp attachment</p>	<p>-1 RG 55/U, 58, 141, 142, 223, 303, 400 -2 RG 174, 179, 187, 188 &amp; 316</p>		<p>Center Contact Holder: T-6057 Solder Gauge: T-6052 Locator Tool: Tensolite-T-6002-2</p>	<p>Tensolite-5721-1SF Tensolite-5721-1 Tensolite-5721-2SF Tensolite-5721-2</p>
<p><b>Procedure 1</b></p>	<p><b>Prepare Coaxial Cable</b></p> <ol style="list-style-type: none"> <li>Trim cable jacket, outer conductor and dielectric to dimensions shown.</li> <li>Place sheath and outer sleeve on cable.</li> <li>Flare outer conductor.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Solder Center Contact to Cable Inner Conductor</b></p> <ol style="list-style-type: none"> <li>Tin inner conductor.</li> <li>Place center contact in holder.</li> <li>Heat center contact with soldering iron and carefully push it over inner conductor to rest firmly against soldering gauge.</li> <li>Remove excess solder or splatter.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Housing Sub-Assembly</b></p> <ol style="list-style-type: none"> <li>Attach locator tool to housing.</li> <li>Place housing in a vise.</li> <li>Insert cable into housing and seat firmly.</li> <li>Slide outer sleeve over conductor and crimp or solder in place.</li> </ol>			
<p><b>Procedure 4</b></p>	<p><b>Shrink Sheath to Cable</b></p> <ol style="list-style-type: none"> <li>Position sheath over outer sleeve as shown.</li> <li>Apply indirect heat with thermo gun to shrink sheath.</li> <li>Remove locator tool.</li> </ol>			
<p><b>Procedure 5</b></p>	<p><b>Inspect Completed Assembly</b></p> <ol style="list-style-type: none"> <li>Adherence to assembly steps given should yield tolerances shown.</li> </ol>			

# Assembly Instructions AI-111

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMA male connector straight solder attachment	-1 .141 semi-rigid -2 .085 semi-rigid -3 .141 micro-porous		Fixture Base: Tensolite-T-6053 Clamp Inserts: Tensolite-T-6055-1 or -2 Center Contact Holder: Tensolite-T-6057 Soldering Gauge: Tensolite-T-6052	Tensolite-5285-1 Tensolite-5285-2 Tensolite-5285-3 And SF Models
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.			
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b> 1. Slide center conductor over cable inner conductor and seat firmly against soldering gauge and solder.			
<b>Procedure 3</b>	<b>Attach Cable to Housing</b> 1. Place housing onto cable and place cable into soldering fixture and tighten locator to seat firmly against cable. 2. Slide housing over nose of locator and solder in place.			
<b>Procedure 4</b>	<b>Installing Dielectric into Housing</b> 1. Attach insert tool to housing. 2. Insert dielectric into tool and press into place. 3. Remove insert tool.			
<b>Procedure 5</b>	<b>Inspection of Completed Connector Assembly</b> 1. Adherence to assembly steps given will yield tolerances shown.			

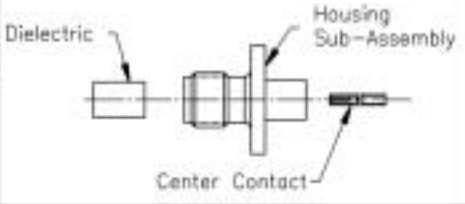
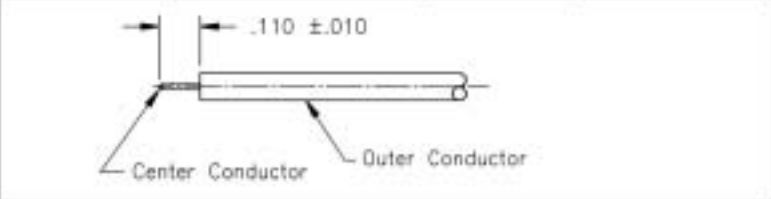
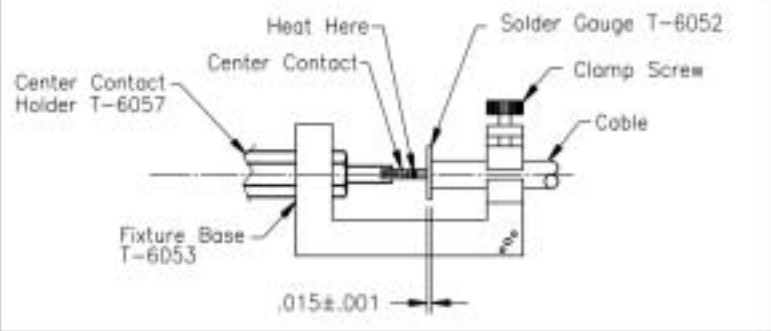
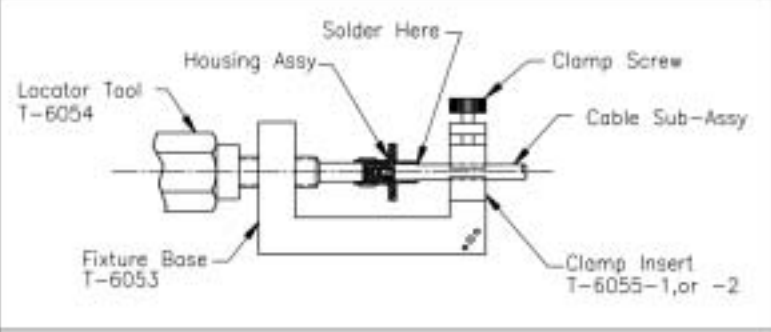
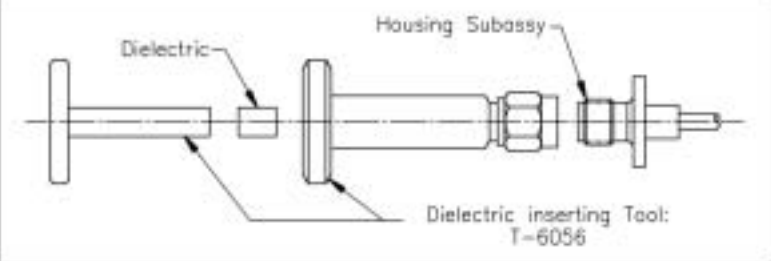
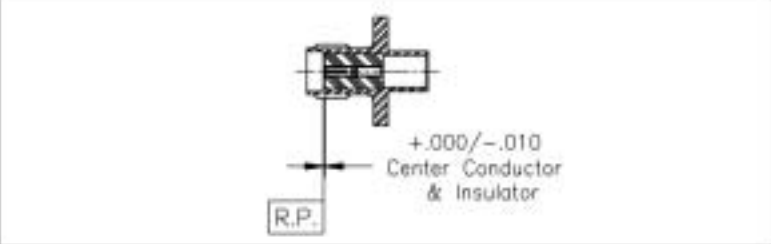


# Assembly Instructions AI-112

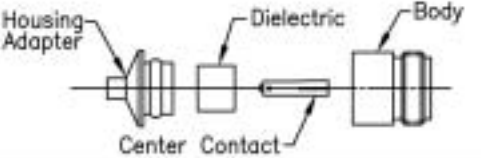
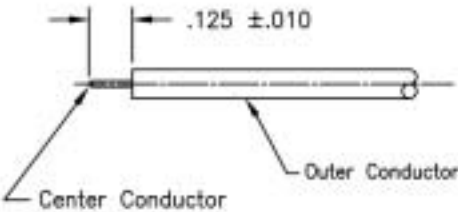
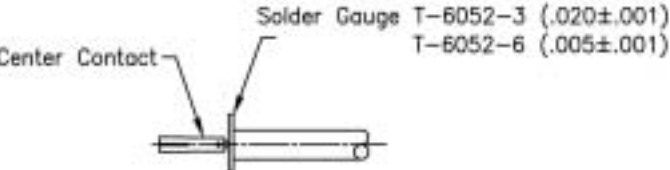
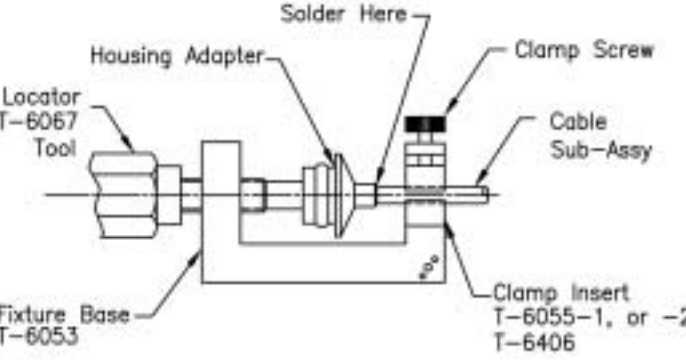
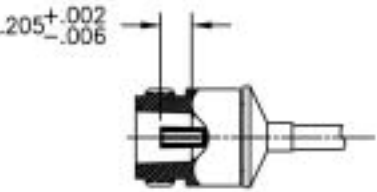
<b>Connector Type</b> "N" Female Flange mount, Direct solder Attachment	<b>Cable Type</b> -1SF Ø .141 S/R -3SF Ø .141 S/R Micro-Porous -2SF Ø .085 S/R -4SF Ø .250 S/R	<b>Connector Components</b> 	<b>Tools Required</b> Locator Tool: Fixture Base: Clamp Insert: Clamp Insert: Soldering Gauge:	<b>P/N</b> T-6067 T-6053 T-6055-1,-2 T-6406 T-6052-3,-8	<b>Connector P/N</b> 8012-1SF 8012-2SF 8012-3SF 8012-4SF							
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.											
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b> 1. Slide center conductor over cable inner conductor and seat firmly against soldering gauge and solder. <table border="1" data-bbox="386 850 722 982"> <thead> <tr> <th>CONNECTOR</th> <th>TOOL (GAUGE)</th> </tr> </thead> <tbody> <tr> <td>-1SF</td> <td>T-6052-3</td> </tr> <tr> <td>-2SF</td> <td>T-6052-6</td> </tr> <tr> <td>-3SF</td> <td>T-6052-3</td> </tr> <tr> <td>-4SF</td> <td>T-6052-3</td> </tr> </tbody> </table>	CONNECTOR	TOOL (GAUGE)	-1SF	T-6052-3	-2SF	T-6052-6	-3SF	T-6052-3	-4SF	T-6052-3	
CONNECTOR	TOOL (GAUGE)											
-1SF	T-6052-3											
-2SF	T-6052-6											
-3SF	T-6052-3											
-4SF	T-6052-3											
<b>Procedure 3</b>	<b>Attach Cable to Housing</b> 1. Place housing onto cable, place cable into soldering fixture, then tighten locator to seat firmly against cable. 2. Slide housing over nose of locator and solder in place.											
<b>Procedure 4</b>	<b>Attach Body to Housing</b> 1. Insert the dielectric, counter bore toward front over the center conductor into the housing. 2. Apply locator tool to the housing adapter threads. 3. Engage threads of housing adapter and body, and torque to 45 inch pounds.											



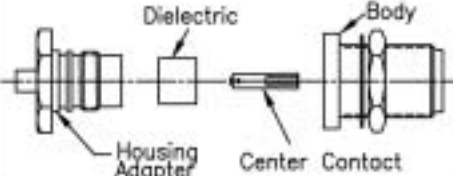
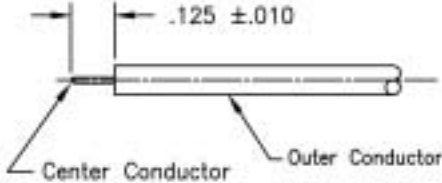
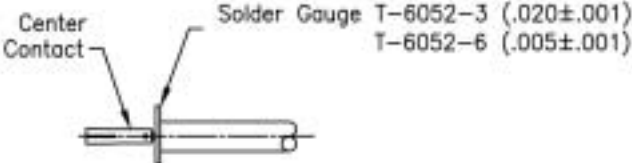
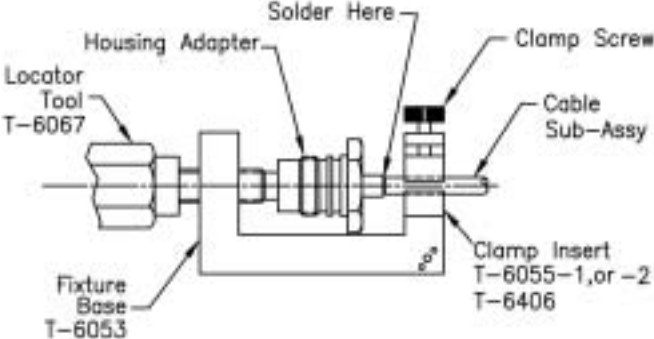
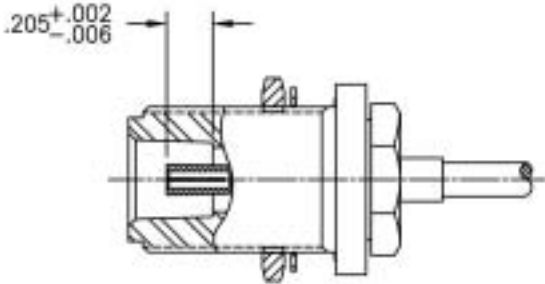
# Assembly Instructions AI-113

Connector Type SMA Female Straight direct Solder Attachment	Cable Type -1 Ø .141 S/R -2 Ø .085 S/R -3 Ø .141 M/P	Connector Components 	Tools Required Fixture Base: T-6053 Clamp Inserts: T-6055-1,-2 Center Contact Holder: T-6057 Solder Gauge: T-6052 Locator Tool: T-6054 Dielec. Inserting Tool: T-6056	P/N T-6053 T-6055-1,-2 T-6057 T-6052 T-6054 T-6056	Connector P/N 5228-1,-2,-3 5229-1,-2,-3 5286-1,-2,-3 5289-1,-2,-3 And SF Models
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.				
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b> 1. Slide center conductor over cable inner conductor and seat firmly against soldering gauge and solder.				
<b>Procedure 3</b>	<b>Attach Cable to Housing</b> 1. Place housing onto cable, place cable into soldering fixture, then tighten locator to seat firmly against cable. 2. Slide housing over nose of locator and solder in place.				
<b>Procedure 4</b>	<b>Attach Body to Housing</b> 1. Attach insert tool to housing. 2. Insert dielectric into tool and press into place. 3. Remove insert tool.				
<b>Procedure 5</b>	<b>Inspection of Completed Connector Assembly</b> 1. Adherence to the steps will yield tolerances shown.				

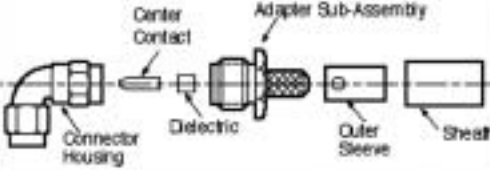
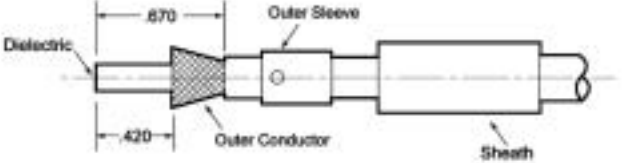
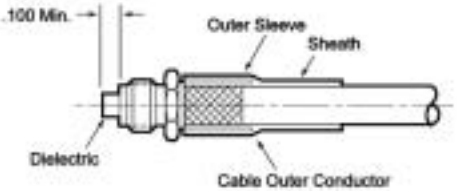
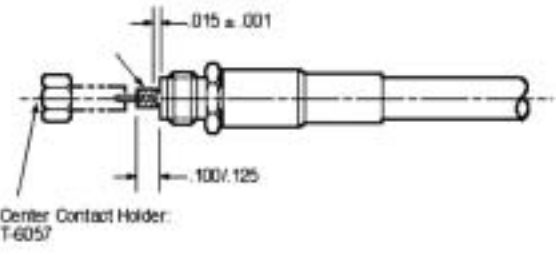
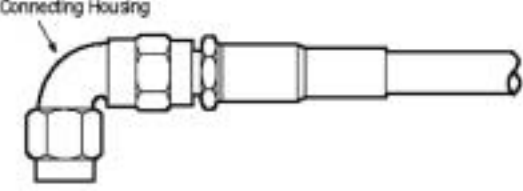
# Assembly Instructions AI-114

<b>Connector Type</b> "N" Female Direct solder Attachment	<b>Cable Type</b> -1 Ø .141 S/R -3 Ø .141 M/P Micro-Porous -2 Ø .085 S/R -4 Ø .250 S/R	<b>Connector Components</b> 	<b>Tools Required</b> Locator Tool: Fixture Base: Clamp Insert: Clamp Insert: Soldering Gauge:	<b>P/N</b> T-6067 T-6053 T-6055-1,-2 T-6406 T-6052	<b>Connector P/N</b> 8010-1SF 8010-2SF 8010-3SF 8010-4SF							
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.											
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b> 1. Slide center conductor over cable inner conductor and seat firmly against soldering gauge and solder.	 <table border="1" data-bbox="370 877 704 1008"> <thead> <tr> <th>CONNECTOR</th> <th>TOOL (GAUGE)</th> </tr> </thead> <tbody> <tr> <td>-1SF</td> <td>T-6052-3</td> </tr> <tr> <td>-2SF</td> <td>T-6052-6</td> </tr> <tr> <td>-3SF</td> <td>T-6052-3</td> </tr> <tr> <td>-4SF</td> <td>T-6052-3</td> </tr> </tbody> </table>	CONNECTOR	TOOL (GAUGE)	-1SF	T-6052-3	-2SF	T-6052-6	-3SF	T-6052-3	-4SF	T-6052-3
CONNECTOR	TOOL (GAUGE)											
-1SF	T-6052-3											
-2SF	T-6052-6											
-3SF	T-6052-3											
-4SF	T-6052-3											
<b>Procedure 3</b>	<b>Attach Cable to Housing</b> 1. Place housing onto cable, place cable into soldering fixture, then tighten locator to seat firmly against cable. 2. Slide housing over nose of locator and solder in place.											
<b>Procedure 4</b>	<b>Attach Body to Housing</b> 1. Insert the dielectric, counter bore toward front over the center conductor into the housing. 2. Apply locator tool to the housing adapter threads. 3. Engage threads of housing adapter and body, and torque to 45 inch pounds.											

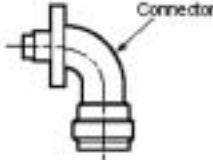
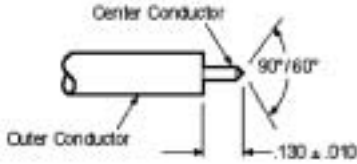
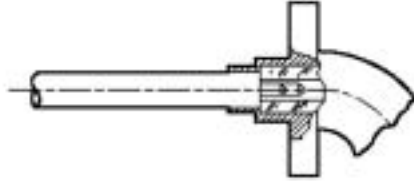
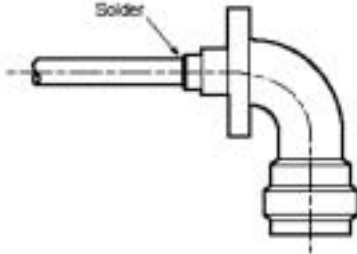
# Assembly Instructions AI-115

Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N							
"N" Female Direct solder Attachment	-1SF Ø .141 S/R -3SF Ø .141 S/R Microperous -2SF Ø .085 S/R -4SF Ø .250 S/R		Locator Tool: Fixture Base: Clamp Insert: Soldering Gauge: Clamp Insert:	T-6067 T-6053 T-6055-1,-2 T-6052-3,-6 T-6406	8011-1SF 8011-2SF 8011-3SF 8011-4SF							
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.											
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b> 1. Slide center conductor over cable inner conductor and seat firmly against soldering gauge and solder.	 <table border="1" data-bbox="367 905 699 1031"> <thead> <tr> <th>CONNECTOR</th> <th>TOOL (GAUGE)</th> </tr> </thead> <tbody> <tr> <td>-1SF</td> <td>T-6052-3</td> </tr> <tr> <td>-2SF</td> <td>T-6052-6</td> </tr> <tr> <td>-3SF</td> <td>T-6052-3</td> </tr> <tr> <td>-4SF</td> <td>T-6052-3</td> </tr> </tbody> </table>	CONNECTOR	TOOL (GAUGE)	-1SF	T-6052-3	-2SF	T-6052-6	-3SF	T-6052-3	-4SF	T-6052-3
CONNECTOR	TOOL (GAUGE)											
-1SF	T-6052-3											
-2SF	T-6052-6											
-3SF	T-6052-3											
-4SF	T-6052-3											
<b>Procedure 3</b>	<b>Attach Cable to Housing</b> 1. Place housing onto cable, place cable into soldering fixture, then tighten locator to seat firmly against cable. 2. Slide housing over nose of locator and solder in place.											
<b>Procedure 4</b>	<b>Attach Body to Housing</b> 1. Insert the dielectric, counter bore toward front over the center conductor into the housing. 2. Apply locator tool to the housing adapter threads. 3. Engage threads of housing adapter and body, and torque to 45 inch pounds.											

# Assembly Instructions AI-116

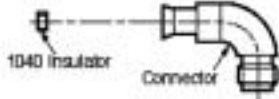
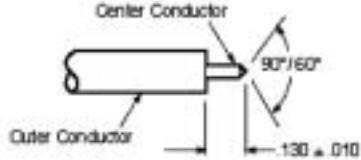
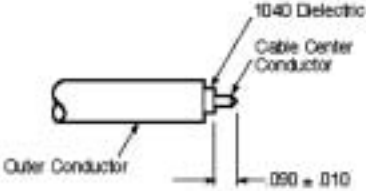
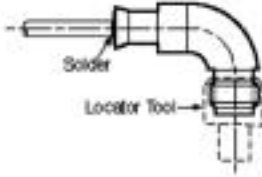
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMA male radius right angle crimp or solder attachment</p>	<p>-1 RG 55, 58, 141, 142, 223, 303, and 400 -2 RG 174, 179, 188, 187, and 316</p>		<p>Center Contact Holder: Tensolite-T-6057 Solder Gauge: Tensolite-T-6052 Crimp Tool: Tensolite-T-6061-1 (GSC DIE 205/219) FOR-1 and Tensolite-T-6061-2 (GSC DIE 128) FOR-2</p>	<p>Tensolite-5750-1CC Tensolite-5750-1CCSF Tensolite-5750-2CC Tensolite-5750-2CCSF</p>
<p><b>Procedure 1</b></p>	<p><b>Prepare Coaxial Cable End</b></p> <ol style="list-style-type: none"> <li>Place sheath and outer sleeve on cable.</li> <li>Remove end portion of cable jacket to expose cable conductor.</li> <li>Trim outer conductor to length.</li> <li>Flare outer conductor.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Attaching Adapter Sub-Assembly to Cable</b></p> <ol style="list-style-type: none"> <li>Insert cable into adapter sub-assembly and seat firmly. Note: Cable dielectric should extend .100 min. beyond the end of the adapter sub-assembly.</li> <li>Slide outer sleeve over cable outer conductor.</li> <li>Crimp outer sleeve in place, or solder.</li> <li>Trim and remove excess outer conductors.</li> <li>Position sheath over outer sleeve and heat with thermo gun to shrink.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Attaching Center Conductor to Cable Center Conductor</b></p> <ol style="list-style-type: none"> <li>Trim cable dielectric flush with adapter sub-assembly.</li> <li>Trim cable center conductor to .100/.125 and tin.</li> <li>Place center conductor in holder.</li> <li>Heat center contact with soldering iron and carefully push it over inner conductor to rest firmly against soldering gauge.</li> <li>Remove excess solder or splatter.</li> <li>Install dielectric over soldered center conductor.</li> </ol>	 <p>Center Contact Holder: T-6057</p>		
<p><b>Procedure 4</b></p>	<p><b>Attaching Connector Housing to Adapter Sub-Assembly</b></p> <ol style="list-style-type: none"> <li>Insert adapter-cable assembly into connector housing.</li> <li>Apply Loctite to threads and torque to 30 inch pounds.</li> </ol>			

# Assembly Instructions AI-117

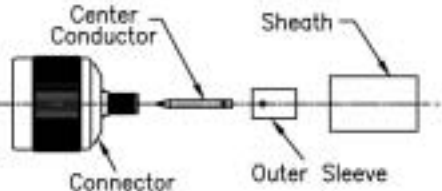
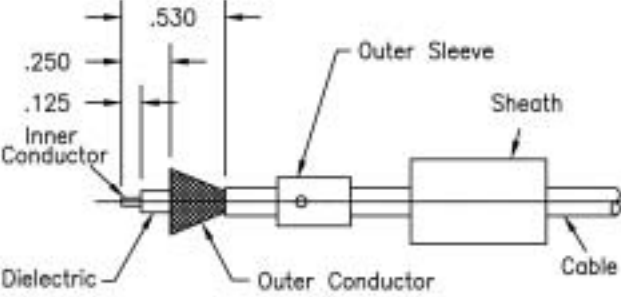
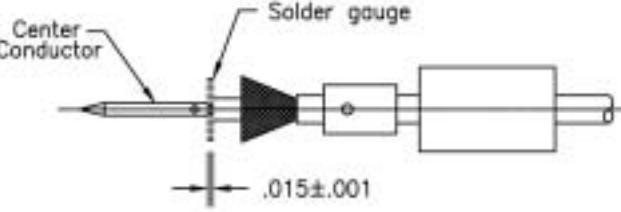
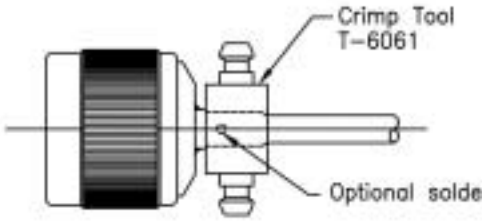
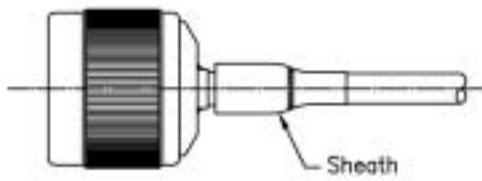
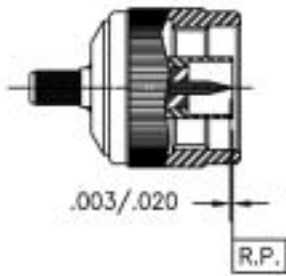
<b>Connector Type</b>  TNC female radius right angle direct solder attachment	<b>Cable Type</b>  .141 semi-rigid	<b>Connector Components</b>  	<b>Tools Required</b>  None	<b>Connector P/N</b>  Tensolite-9031-1
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.			
<b>Procedure 2</b>	<b>Attach Cable to Connector</b> 1. Plug cable into connector and bottom.			
<b>Procedure 3</b>	<b>Soldering Cable to Connector</b> 1. Maintain position of cable firmly against the connector and solder.			



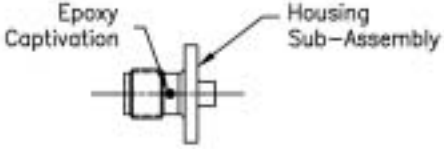
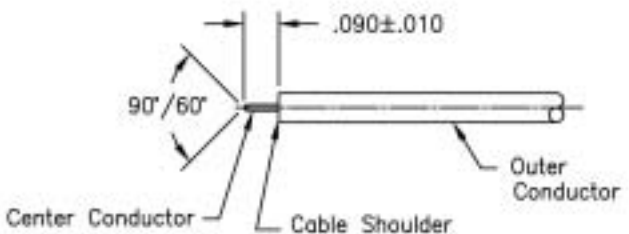
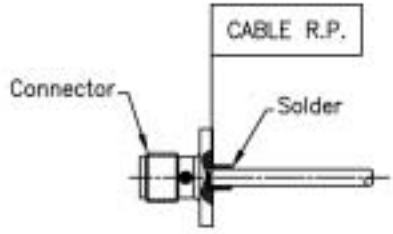
# Assembly Instructions AI-118

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMA female radius right angle, solder attachment</p>	<p>.141 semi-rigid RG 402</p>		<p>Locator Tool: Tensolite-T-6002-2</p>	<p>Tensolite-5235-1 Tensolite-5235-1CC Tensolite-5235-1SF Tensolite-5235-1CCSF</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Trim outer conductor and dielectric to dimension shown.</li> <li>2. Point center conductor as shown.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Install 1040 Insulator</b></p> <ol style="list-style-type: none"> <li>1. Slide 1040 insulator over conductor flush against cable.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Conductor</b></p> <ol style="list-style-type: none"> <li>1. Screw on locator tool to connector.</li> <li>2. Plug cable into connector and bottom.</li> <li>3. Solder.</li> <li>4. Remove locator tool.</li> </ol>			

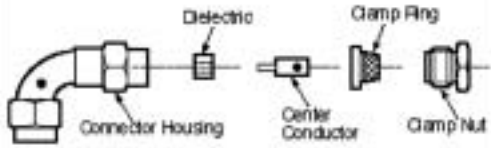
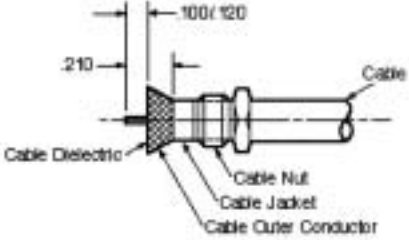
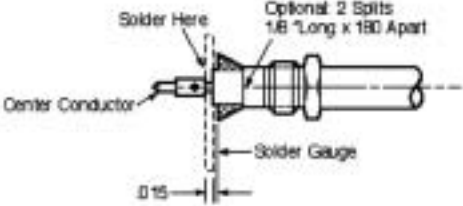
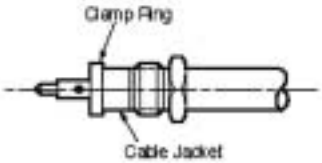
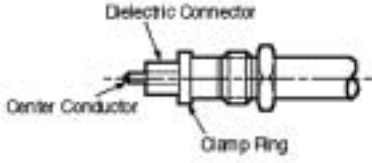
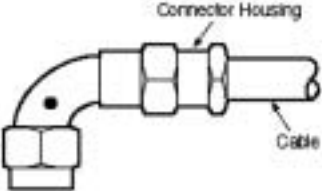
# Assembly Instructions AI-119

<b>Connector Type</b> Type "N" Male Connector Crimp or Solder Attachment	<b>Cable Type</b> RG: 55, 58, 141 142, 223, 303, & 400	<b>Connector Components</b> 	<b>Tools Required</b> Crimp tool: Solder gauge:	<b>P/N</b> T-6061 (GSC DIE: 205/219) T-6052	<b>Connector P/N</b> 8041-15F
<b>Procedure 1</b>	<b>Preparation Coaxial Cable</b> 1. Place sheath and outer sleeve on cable. 2. Remove end portion of cable jacket to expose cable outer conductor. 3. Trim outer conductor to length. 4. Trim cable dielectric to length. 5. Trim inner conductor to length. 6. Flare outer conductor.				
<b>Procedure 2</b>	<b>Solder Center Contact to Cable</b> 1. Tin inner conductor. 2. Place center conductor onto inner conductor to rest against solder gauge. 3. Solder in place. 4. Remove excess solder.				
<b>Procedure 3</b>	<b>Attach Cable to Connector Body</b> 1. Insert cable into body seat firmly. 2. Slide outer sleeve over flared position of outer conductor. 3. Hold cable firmly seated and crimp outer sleeve in place. 4. Optional: Heat outer sleeve and apply solder through solder hole in sleeve.				
<b>Procedure 4</b>	<b>Shrink Sheath to Cable</b> 1. Position sheath over outer sleeve. 2. Apply indirect heat with thermo gun to shrink sheath.				
<b>Procedure 5</b>	<b>Inspection of Completed Connector Assembly</b> 1. Adherence to assembly steps should yield.				

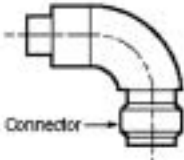
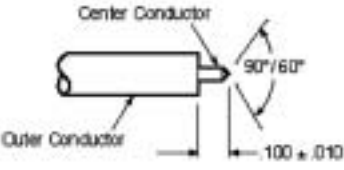
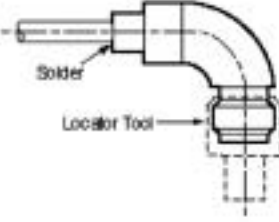
# Assembly Instructions AI-120

<b>Connector Type</b> SMA Female Four or Two Hole Flange Solder Attachment	<b>Cable Type</b> Ø .085 S/R	<b>Connector Components</b> 	<b>Tools Required</b> No tools req'd	<b>Connector P/N</b> 5225-2CC 5224-2CC 5225-2CCSF 5224-2CCSF
<b>Procedure</b>  <div style="font-size: 2em; font-weight: bold; color: blue; text-align: center;">1</div>	<b>Preparation Coaxial Cable</b>  1. Trim outer conductor and dielectric to dimension as shown. 2. Point center conductor as shown.			
<b>Procedure</b>  <div style="font-size: 2em; font-weight: bold; color: blue; text-align: center;">2</div>	<b>Solder Center Contact to Cable</b>  1. Insert cable into body until cable shoulder is flush w/ cable ref. plane. 2. Solder.			

# Assembly Instructions AI-121

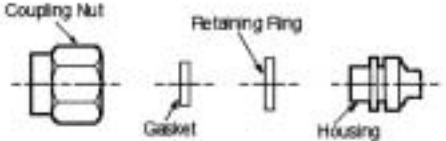
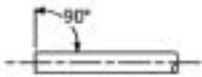
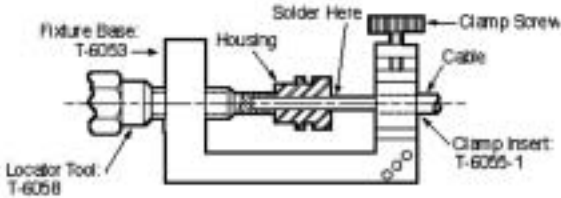
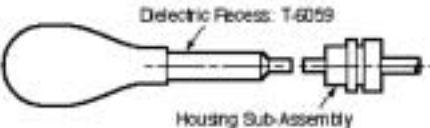
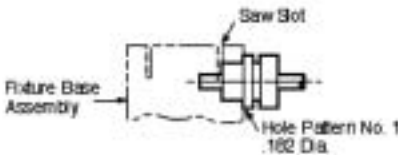
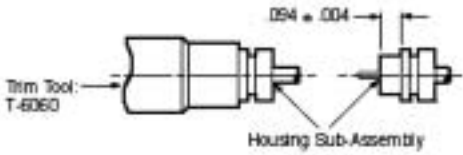
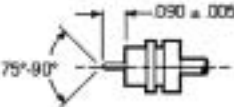

<b>Connector Type</b>  SMA female radius right angle cable clamp attachment	<b>Cable Type</b>  -1 RG 55, 58, 141, 142, 223, 303, 400 -2 RG 174, 179, 187, 188, 316	<b>Connector Components</b>  	<b>Tools Required</b>  Soldering Gauge: Tensolite-T-6052	<b>Connector P/N</b>  Tensolite-5752-1CC Tensolite-5752-1CCSF Tensolite-5752-2CC Tensolite-5752-2CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Place clamp nut onto cable. 2. Trim outer conductor and cable inner conductor to length shown. 3. Flare outer conductor.			
<b>Procedure 2</b>	<b>Solder on Center Conductor</b> 1. Slide center conductor of connector on center conductor of cable and position with solder gauge. 2. Solder.			
<b>Procedure 3</b>	<b>Install Clamp Ring</b> 1. Slide on clamp ring over dielectric, to be positioned flush (as shown).			
<b>Procedure 4</b>	<b>Install Dielectric Connector</b> 1. Slide on dielectric connector over center conductor flush with clamp ring.			
<b>Procedure 5</b>	<b>Insert Cable into Body</b> 1. Housing and torque clamp nut to 25 inch pounds.			

# Assembly Instructions AI-122

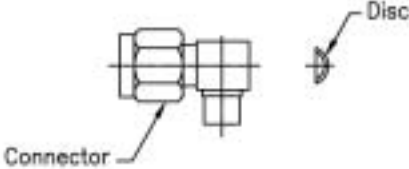
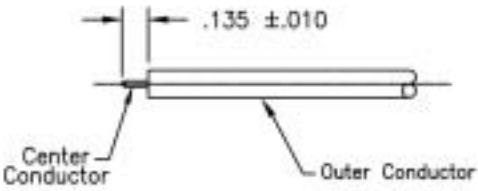
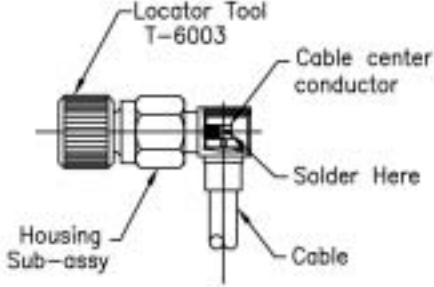
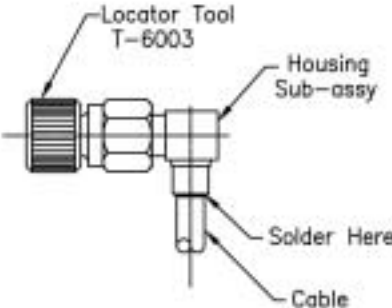
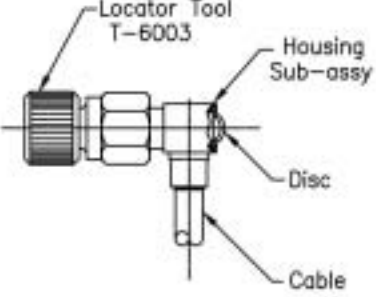
<b>Connector Type</b>  SMA female radius right angle cable solder attachment	<b>Cable Type</b>  .085 semi-rigid	<b>Connector Components</b>  	<b>Tools Required</b>  Locator Tool: Tensolite-T-6002-2	<b>Connector P/N</b>  Tensolite-5235-2 Tensolite-5235-2CC Tensolite-5235-2SF Tensolite-5235-2CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown. 2. Point center conductor as shown.			
<b>Procedure 2</b>	<b>Attach Cable to Connector</b> 1. Screw on locator tool to connector. 2. Plug cable into connector and bottom. 3. Solder. 4. Remove locator tool.			



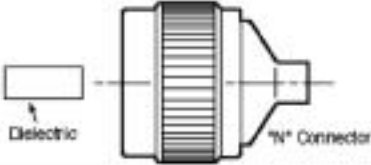
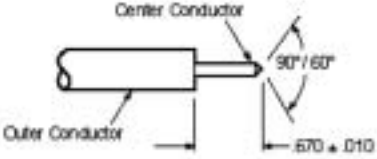
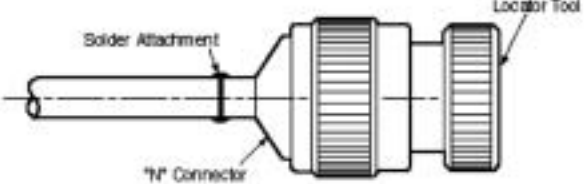
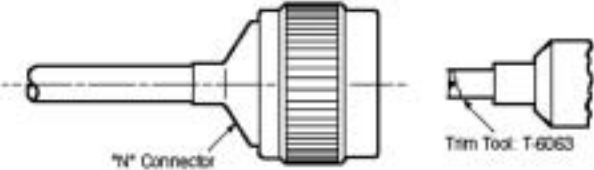
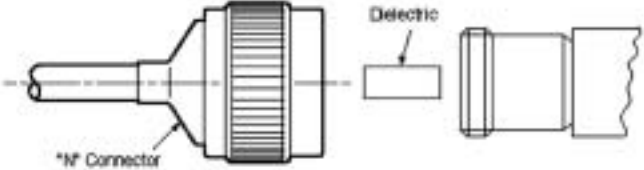
# Assembly Instructions AI-123

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMA straight male connector direct solder attachment	.141 semi-rigid		Fixture Base: Tensolite-T-6053 Clamp Insert: Tensolite-T-6055-1 Locator Tool: Tensolite-T-6058 Dielectric Recess Tool: Tensolite-T-6059 Trim Tool (Optional): Tensolite-T-6060	Tensolite-5319 Tensolite-5319-1 Tensolite-5319-SF Tensolite-5319-1SF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim cable end square and de-burr.			
<b>Procedure 2</b>	<b>Attaching Cable to Housing</b> 1. Place housing on cable and the cable into the fixture as shown. 2. Tighten clamp screw and locator tool firmly against the end of the cable. 3. Slide housing against locator tool and solder in place.			
<b>Procedure 3</b>	<b>Compress Expanded Dielectric</b> 1. Trim extended or exposed dielectric flush with end of the cable outer conductor. 2. Place dielectric recess tool on dielectric and push to recess dielectric within cable outer conductor.			
<b>Procedure 4</b>	<b>Remove Outer Conductor and Dielectric</b> 1. Insert housing into fixture base hole pattern #1. 2. Saw through outer conductor and into dielectric while rotating cable. 3. Remove cable and cut through dielectric with knife. 4. Remove outer conductor and dielectric.			
<b>Procedure 5</b>	<b>Trim End of Housing Sub-Assembly (Optional)</b> 1. Place trim tool over center conductor projection and rotate to face off front face. 2. Inspect for dimensional tolerance $.094 \pm .004$ .			
<b>Procedure 6</b>	<b>Shape Center Conductor</b> 1. Trim to length as shown. 2. File blunt end of center conductor to a $75^\circ - 90^\circ$ cone.			
<b>Procedure 7</b>	<b>Secure Coupling Nut to Housing</b> 1. Place retaining ring and gasket on housing. 2. Compress retaining ring with retaining ring pliers. 3. Push coupling nut onto housing and over retaining ring. 4. Coupling nut should rotate freely.			

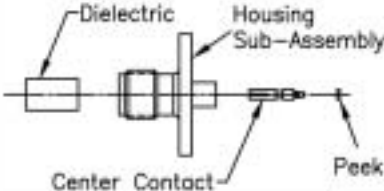
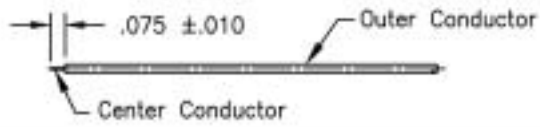
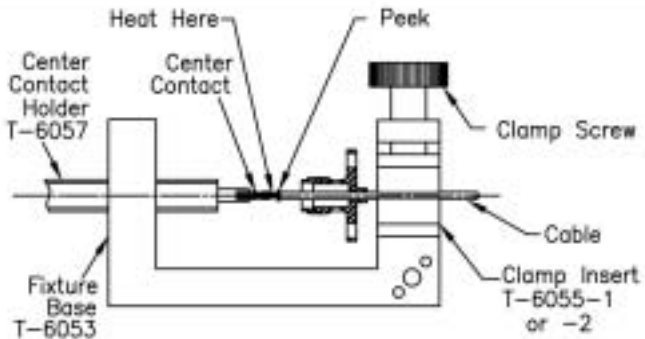
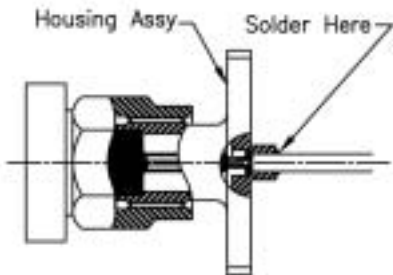
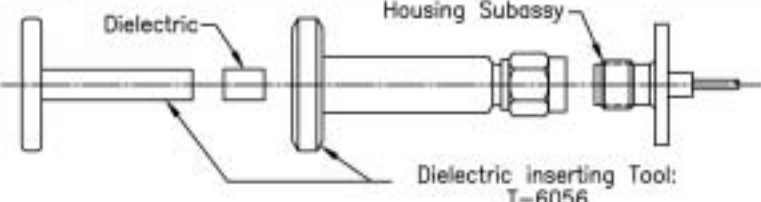
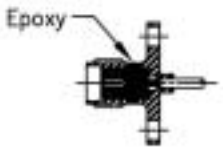
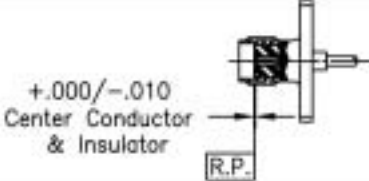
# Assembly Instructions AI-124

<b>Connector Type</b> SMA Male Miter R/A Connector Solder Attachment	<b>Cable Type</b> -1 Ø .141 S/R -2 Ø .085 S/R -3 Ø .141 S/R Micro Porous	<b>Connector Components</b> 	<b>Tools Required</b> Locator Tool:	<b>P/N</b> T-6003	<b>Connector P/N</b> 5850-1CC 5850-1CCSF 5850-2CC 5850-2CCSF 5850-3CC 5850-3CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.				
<b>Procedure 2</b>	<b>Soldering of Center Contact to Cable Center Conductor</b> 1. Secure locator tool to threads of coupling nut. 2. Tin center conductor of cable. * 3. Position cable center conductor in center conductor slot. 4. Place pre-heated soldering iron on tip of contact and solder as shown.  * For micro-porous cable, do not use flux or solvent in cable dielectric area.				
<b>Procedure 3</b>	<b>Soldering of Housing Sub-Assembly to Cable</b> 1. Solder housing sub-assembly to cable as shown.				
<b>Procedure 4</b>	<b>Seal Opening in Housing</b> 1. Position disc as shown in housing sub-assembly. 2. Apply and solder in place. (Do not allow solder to penetrate housing). Option: Disc may be epoxied into place. Do not allow epoxy to penetrate inside housing.				

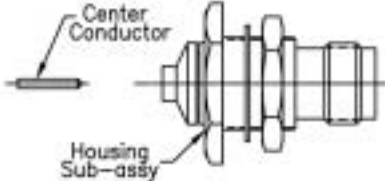
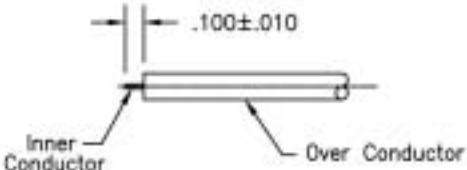
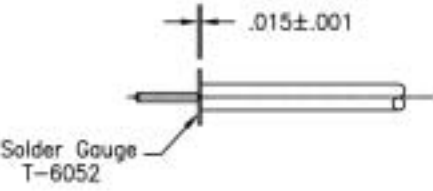
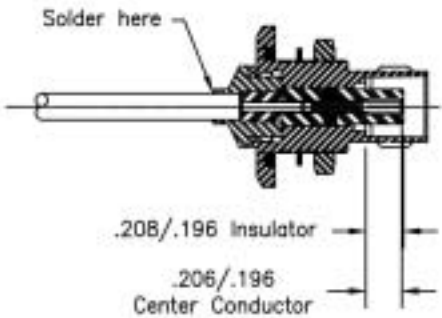
# Assembly Instructions AI-125

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>"N" male connector solder attachment</p>	<p>.250 semi-rigid</p>		<p>Trim Tool: Tensolite-T-6063 Dielectric Tool: Tensolite-T-6064 Locator Tool: Tensolite-T-6086</p>	<p>Tensolite-8009-4 Tensolite-8009-4SF</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Trim outer conductor and dielectric as shown.</li> <li>2. Point center conductor as shown.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>1. Attach locator tool to connector.</li> <li>2. Insert cable into connector as shown.</li> <li>3. Solder in place as shown.</li> <li>4. Remove locator tool.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Trim Teflon</b></p> <ol style="list-style-type: none"> <li>1. Trim dielectric of cable using a trimming tool, Tensolite-T-6063.</li> </ol>			
<p><b>Procedure 4</b></p>	<p><b>Inset Dielectric</b></p> <ol style="list-style-type: none"> <li>1. Insert dielectric using a dielectric loading tool, Tensolite-T-6064.</li> </ol>			

# Assembly Instructions AI-132

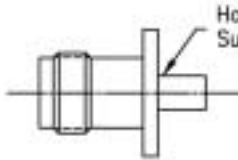
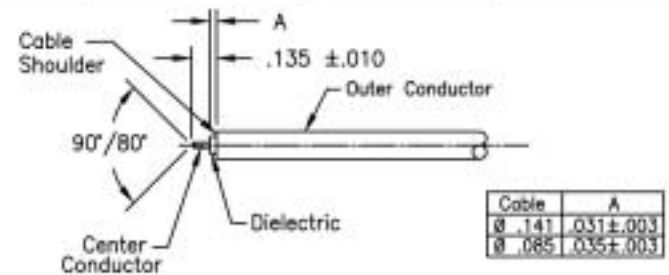
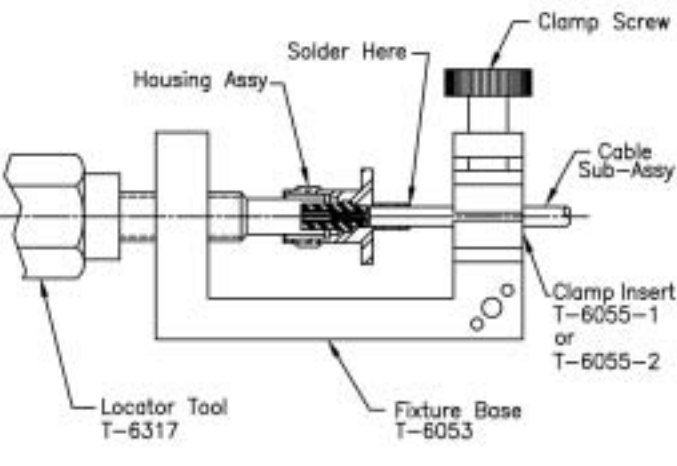
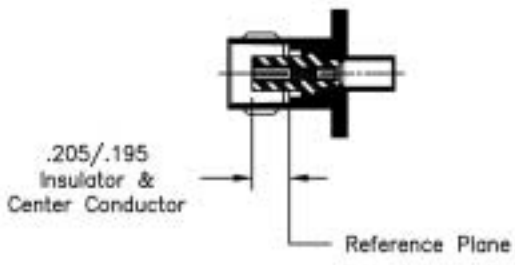
Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
SMA Female Straight Direct Solder Attachment	Ø .047 SEMI-RIGID		Fixture Base: Clamp Inserts: Center Contact Holder: Locator Tool: Dielec. Inserting Tool:	T-6053 T-6055-1,-2 T-6057 T-6054 T-6056	5228-5CC 5228-5CCSF 5229-5CC 5229-5CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b>				
<b>Procedure 2</b>	<b>Soldering of Center Conductor to Cable Inner Conductor</b>				
<b>Procedure 3</b>	<b>Attach Cable to Housing</b>				
<b>Procedure 4</b>	<b>Installing Dielectric into Housing</b>				
<b>Procedure 5</b>	<b>Captive Center Conductor</b>				
<b>Procedure 6</b>	<b>Inspection of Completed Connector Assembly</b>				

# Assembly Instructions AI-136

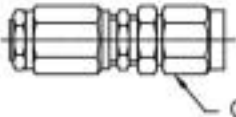
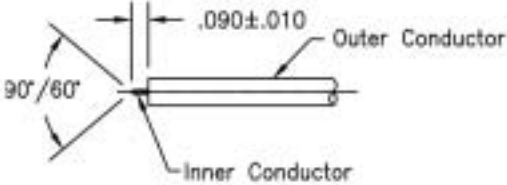
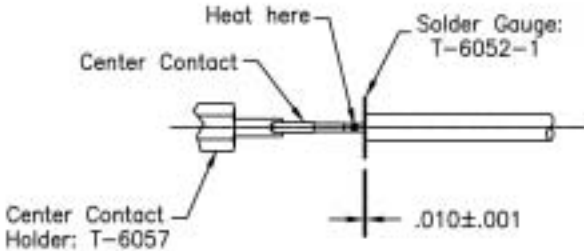
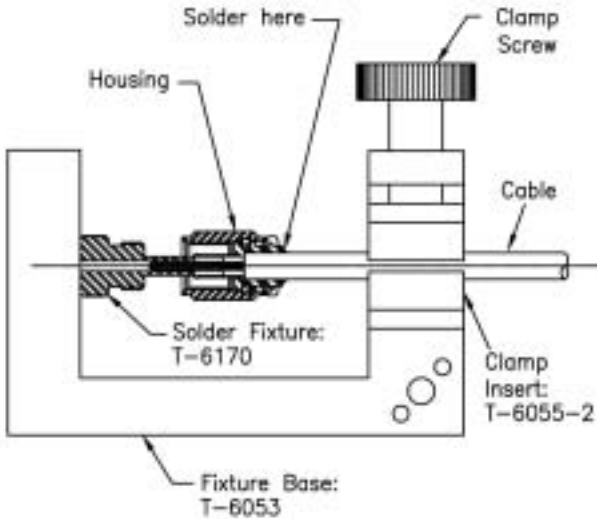

<b>Connector Type</b> TNC Female Bulkhead Feedthrough Cable	<b>Cable Type</b> -1SF Ø .141 S/R -2SF Ø .085 S/R -3SF Ø .141 S/R Micro Porous	<b>Connector Components</b> 	<b>Tools Required</b> Soldering Gauge:	<b>P/N</b> T-6052	<b>Connector P/N</b> 9011-1SF 9011-2SF 9011-3SF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.				
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b> 2. Slide center conductor in place as shown over inner conductor of cable & seat firmly against solder gauge & solder.				
<b>Procedure 3</b>	<b>Attach Cable to Housing Sub-Assembly</b> 1. Insert inner conductor through adapter to housing center conductor & seat firmly as shown and solder.				



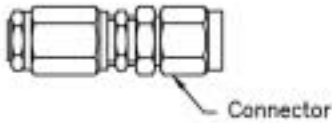
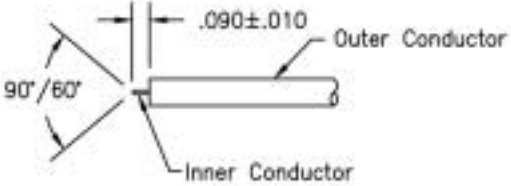
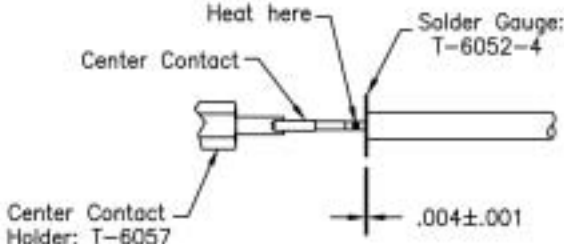
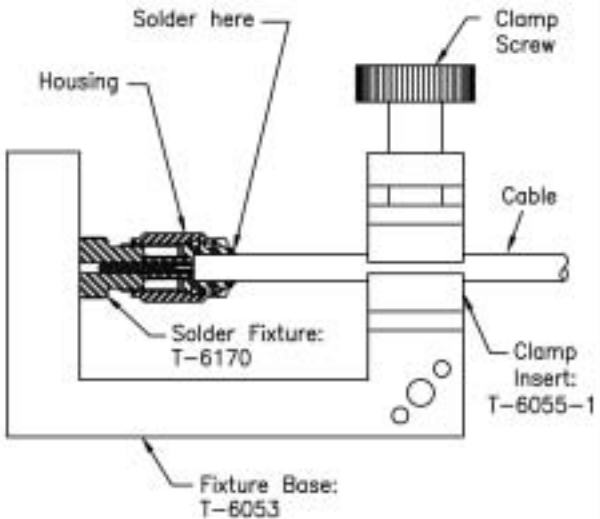

# Assembly Instructions AI-159

<b>Connector Type</b> TNC Female Straight Cable Jack Direct Solder Attachment	<b>Cable Type</b> -1 Ø .141 S/R -2 Ø .085 S/R -3 Ø .141 S/R Micro Porous	<b>Connector Components</b> 	<b>Tools Required</b> Fixture Base: Locator Tool: Clamp Inserts:	<b>P/N</b> T-6053 T-6317 T-6055-1 or -2	<b>Connector P/N</b> 9012-1 & -1SF 9012-2 & -2SF 9012-3 & -3SF						
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimension shown.	 <table border="1" data-bbox="1291 567 1469 640"> <thead> <tr> <th>Cable</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>Ø .141</td> <td>0.31 ± .003</td> </tr> <tr> <td>Ø .085</td> <td>0.35 ± .003</td> </tr> </tbody> </table>				Cable	A	Ø .141	0.31 ± .003	Ø .085	0.35 ± .003
Cable	A										
Ø .141	0.31 ± .003										
Ø .085	0.35 ± .003										
<b>Procedure 2</b>	<b>Attach Cable to Connector</b> 1. Attach locator tool to housing. 2. Plug cable into housing until cable shoulder is flushed to housing. 3. Place loose assembly in fixture base as shown. a. Tighten clamp screw to secure cable. b. Tighten locator tool to seat cable firmly against housing. 4. Solder cable to housing sub-assembly as shown. Note: Fixture should be clamped vertically in vise to keep housing seated against locator tool.										
<b>Procedure 3</b>	<b>Install Dielectric into Housing</b> 1. Adherence to steps given will yield tolerances shown.										

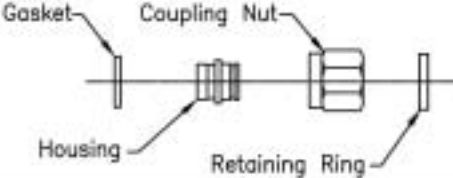
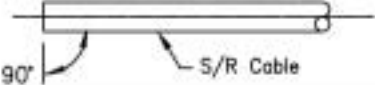
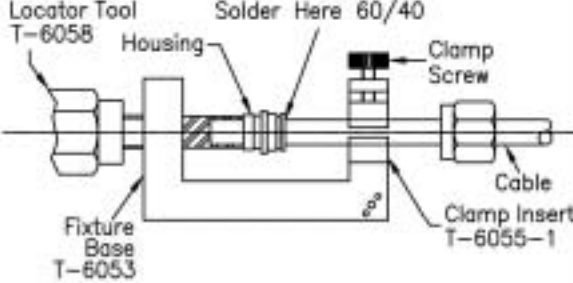
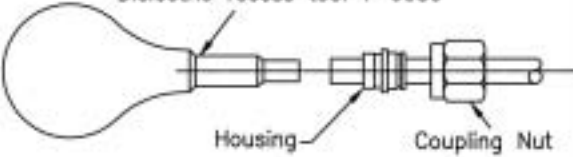
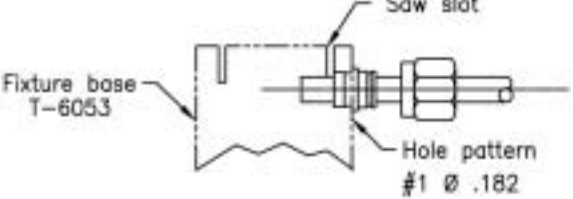
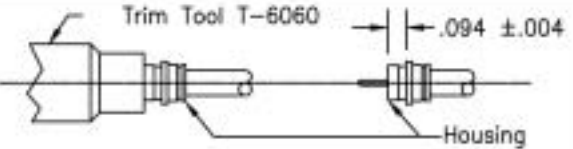
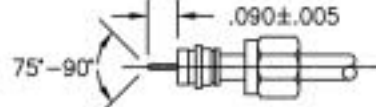
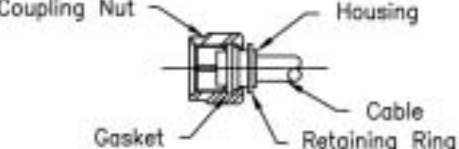
# Assembly Instructions AI-178

Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
SMA Male Phase Adjustable Connector Solder Attachment	Ø .085 S/R	 <p>Connector</p>	Fixture Base Clamp Insert: Solder Gauge: Solder Fixture: Center Contact Holder:	T-6053 T-6055-2 T-6052-1 T-6170 T-6057	5999-2CCSF 5999-201-1CCSF 5999-1175-1CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimensions shown.	 <p>Outer Conductor Inner Conductor</p>			
<b>Procedure 2</b>	<b>Soldering of Center Contact to Cable Inner Conductor</b> 1. Tin inner conductor of cable. 2. Place solder gauge on inner conductor flush with end of outer conductor. 3. Place center contact in holder, heat center contact and push it over inner conductor of cable to rest firmly against solder gauge. 4. Remove solder gauge and excess solder.	 <p>Heat here Solder Gauge: T-6052-1 Center Contact Center Contact Holder: T-6057 .010±.001</p>			
<b>Procedure 3</b>	<b>Solder of Cable Sub-Assembly to Housing</b> 1. Place connector housing on end of cable sub-assembly. 2. Place loose assembly in fixture base as shown. 3. Nest center contact in solder fixture and tighten it to seat cable firmly. 4. Tighten clamp screw to secure cable. 5. Maintain position of housing firmly against solder fixture and solder.	 <p>Solder here Housing Clamp Screw Cable Solder Fixture: T-6170 Clamp Insert: T-6055-2 Fixture Base: T-6053</p> <p>Note: Fixture should be clamped vertically in vise to keep housing seated against solder fixture.</p>			
<b>Procedure 4</b>	<b>Attaching Connector to Cable Housing</b> 1. Insert cable housing into connector and screw in up to two nut rotation, to have contact secure.	 <p>SMA</p>			

# Assembly Instructions AI-179

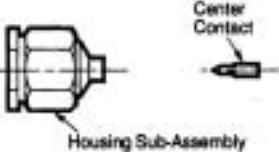
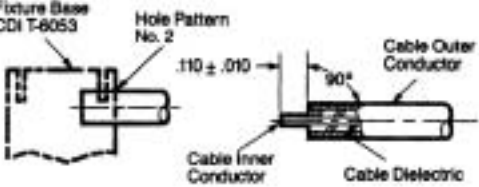
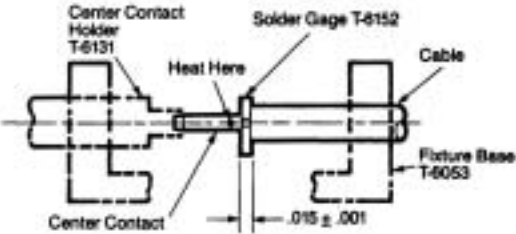
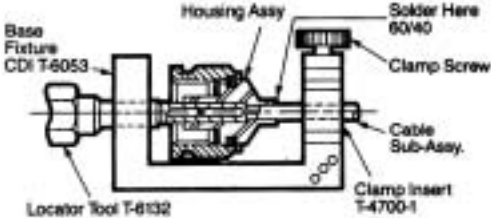
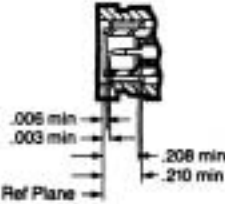
Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
SMA Male Phase Adjustable Connector Solder Attachment	Ø .141 S/R		Fixture Base Clamp Insert: Solder Gauge: Solder Fixture: Center Contact Holder:	T-6053 T-6055-1 T-6052-4 T-6170 T-6057	5999-1CCSF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim outer conductor and dielectric to dimensions shown.				
<b>Procedure 2</b>	<b>Soldering of Center Contact to Cable Inner Conductor</b> 1. Tin inner conductor of cable. 2. Place solder gauge on inner conductor flush with end of outer conductor. 3. Place center contact in holder, heat center contact and push it over inner conductor of cable to rest firmly against solder gauge. 4. Remove solder gauge and excess solder.				
<b>Procedure 3</b>	<b>Solder of Cable Sub-Assembly to Housing</b> 1. Place connector housing on end of cable sub-assembly. 2. Place loose assembly in fixture base as shown. 3. Nest center contact in solder fixture and tighten it to seat cable firmly. 4. Tighten clamp screw to secure cable. 5. Maintain position of housing firmly against solder fixture and solder.  Note: Fixture should be clamped vertically in vise to keep housing seated against solder fixture.				
<b>Procedure 4</b>	<b>Attaching Connector to Cable Housing</b> 1. Insert cable housing into connector and screw in up to two nut rotation, to have contact secure.		SMA MALE INTERFACE PER MIL-STD-348		

# Assembly Instructions AI-222

<b>Connector Type</b> SMA Male Straight  Direct Solder Attachment	<b>Cable Type</b> Ø .141 SEMI-RIGID	<b>Connector Components</b> 	<b>Tools Required</b> Retaining Ring Pliers: T-6051 Fixture Base: T-6053 Clamp insert: T-6055-1 Locator Tool: T-6058 Dielectric Recess Tool: T-6059 Trim Tool (Optional): T-6060	<b>Connector P/N</b> 5317SF
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Trim cable end square and deburr.			
<b>Procedure 2</b>	<b>Attach Cable to Housing</b> 1. Place connector housing on end of cable. 2. Place loose assembly in fixture base as shown: 2.1 Nest cable end in locator tool. 2.2 Tighten clampscrew to secure cable. 2.3 Tighten locator tool to seat cable firmly. 3. Slide housing against locator tool. 4. Maintain position of housing firmly against locator tool and solder. Note: Fixture should be clamped vertically in vise to keep housing seated against locator tool.			
<b>Procedure 3</b>	<b>Compress Expanded Dielectric</b> 1. Trim extended or exposed dielectric flush with end of the cable outer conductor. 2. Place dielectric recess tool on dielectric and push to recess dielectric within cable outer conductor.			
<b>Procedure 4</b>	<b>Remove Outer Conductor and Dielectric</b> 1. Insert squared end of cable into fixture base hole pattern #1. 2. Place saw in saw slot and cut through outer conductor and into dielectric while rotating the cable. 3. Remove cable from fixture and finish cutting dielectric with cutting blade. 4. Bare inner conductor by prying out outer conductor and dielectric from cable			
<b>Procedure 5</b>	<b>Trim End of Housing Sub-Assembly (Optional)</b> 1. Place trim tool over inner conductor projection and rotate to face off front face. 2. Inspect for dimensional tolerance $.094 \pm .004$ .			
<b>Procedure 6</b>	<b>Shape Inner Conductor</b> 1. Trim to length as shown. 2. File blunt end of inner conductor to an 75°~90° cone.			
<b>Procedure 7</b>	<b>Secure Coupling Nut to Housing</b> 1. Place gasket on housing. 2. Slide coupling nut onto housing. 3. Snap retaining ring in housing groove just behind coupling nut. 4. Coupling nut should rotate freely.			

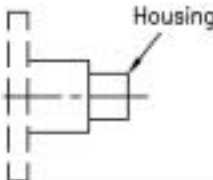
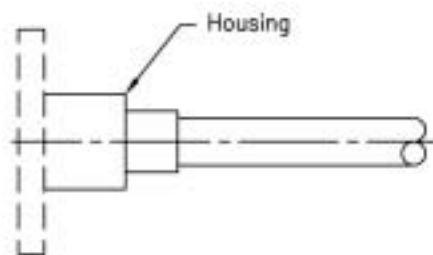
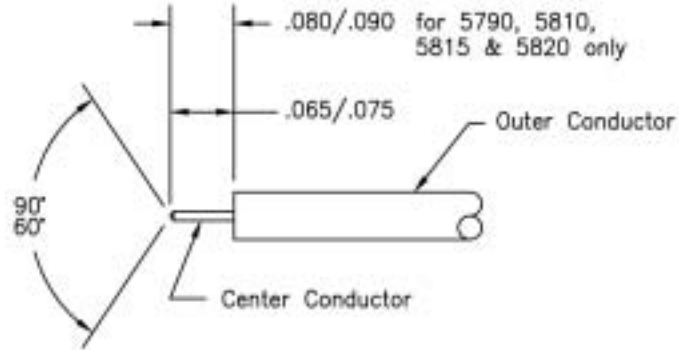
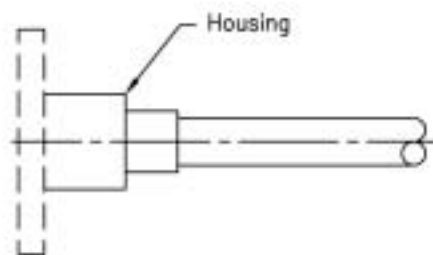


# Assembly Instructions AI-223

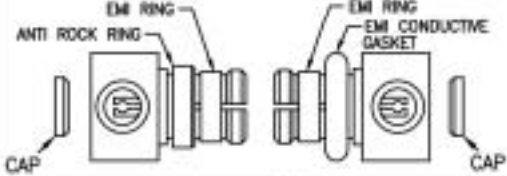
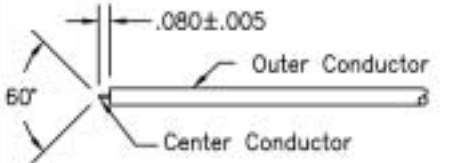
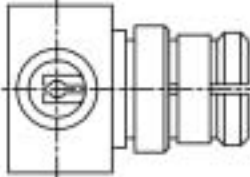
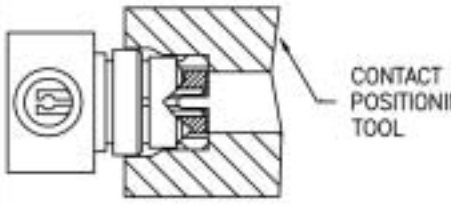
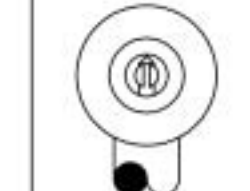
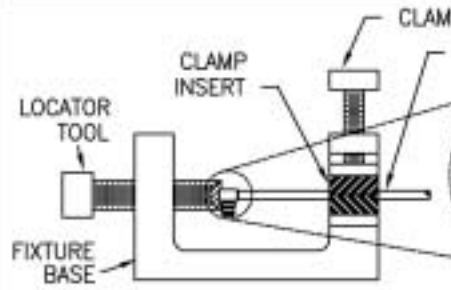
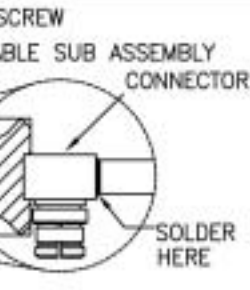
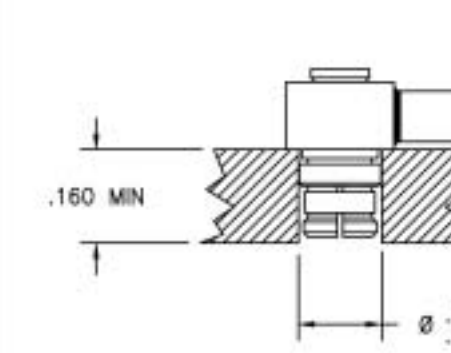

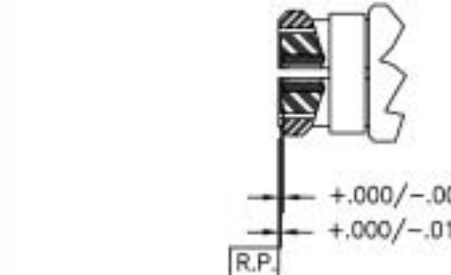

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>TNC male connector straight solder attachment</p>	<p>-1 .141 semi-rigid -2 .085 semi-rigid -3 .141 microporous</p>		<p>Fixture Base: T-6053 Clamp Insert: T-6055-1&amp;-2 Center Contact Holder: T-6131 Solder Gauge: T-6152 Locator Tool: T-6132</p>	
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Insert squared cable end into fixture base hole pattern #2.</li> <li>2. Place saw in saw slot and cut through outer conductor and into dielectric while rotating cable.</li> <li>3. Remove cable from fixture and finish cutting dielectric with cutting blade.</li> <li>4. Bare inner conductor by prying out outer conductor and dielectric from cable.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Soldering of Center Contact to Cable Inner Conductor</b></p> <ol style="list-style-type: none"> <li>1. Tin inner conductor of cable.</li> <li>2. Place solder gage on inner conductor, flush with end of outer conductor.</li> <li>3. Place center contact in holder, heat center contact and push it over inner conductor of cable to rest firmly against solder gage.</li> <li>4. Remove solder gage and excess solder.</li> </ol> <p>*For microporous cable do not use flux or solvent in cable dielectric area.</p>			
<p><b>Procedure 3</b></p>	<p><b>Soldering of Cable Sub-Assembly to Housing</b></p> <ol style="list-style-type: none"> <li>1. Place connector housing on end of cable sub-assembly.</li> <li>2. Place loose assembly in fixture base as shown.             <ol style="list-style-type: none"> <li>2.1 Tighten clamp screw to secure cable.</li> <li>2.2 Tighten locator tool to seat cable firmly against housing.</li> </ol> </li> <li>3. Solder cable to housing sub-assembly as shown.</li> </ol> <p>Note: Fixture should be clamped vertically in vise to keep housing seated against locator tool.</p>			
<p><b>Procedure 4</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>1. Adherence to steps given will yield tolerances shown.</li> </ol>			



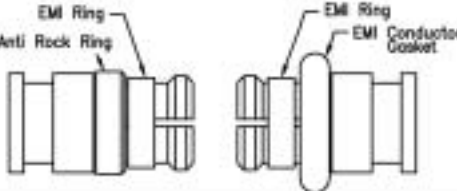
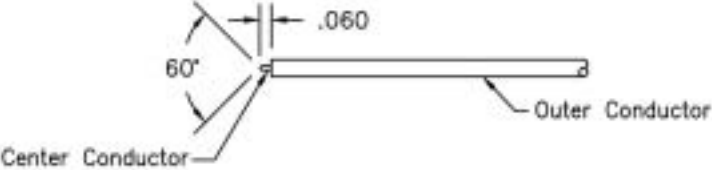
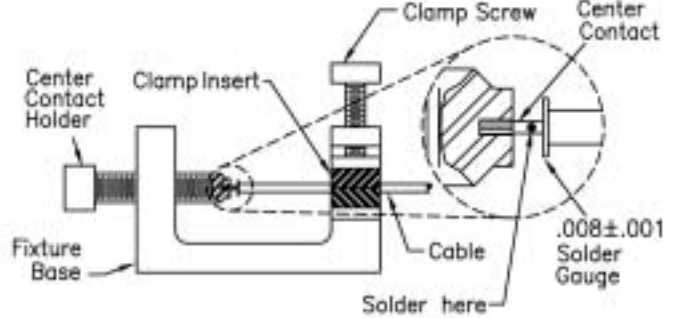
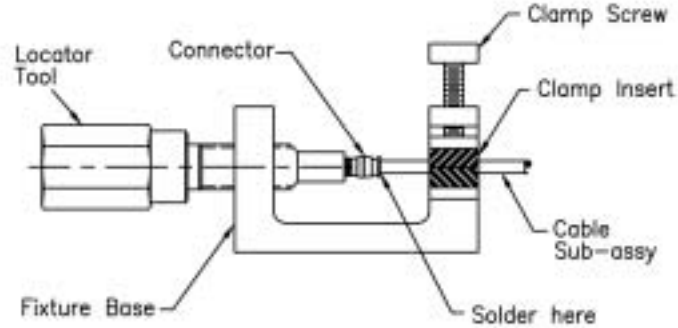
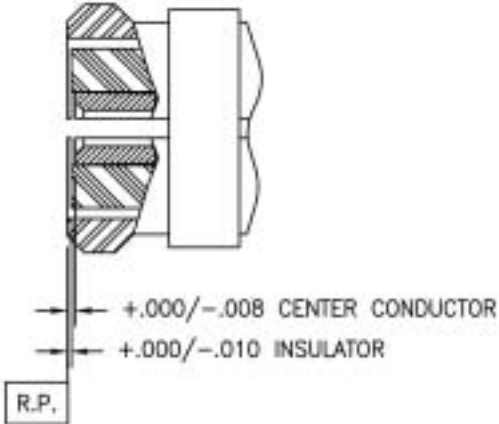
# Assembly Instructions AI-224

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p><b>Procedure</b></p> <p><b>1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Trim outer conductor and dielectric to dimension shown.</li> <li>2. Point center conductor.</li> </ol>		<p>No special tools required.</p>	<p>5785 Thru 5787 5790 Thru 5794 5810 Thru 5824</p>
<p><b>Procedure</b></p> <p><b>2</b></p>	<p><b>Attach Cable to Housing</b></p> <ol style="list-style-type: none"> <li>1. Plug cable into connector and bottom.</li> <li>2. Maintain position of cable firmly against the connector and solder.</li> </ol>		 <p>.080/.090 for 5790, 5810, 5815 &amp; 5820 only</p> <p>.065/.075</p> <p>Outer Conductor</p> <p>Center Conductor</p> <p>90° 60°</p>	

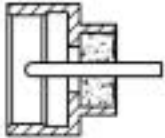
# Assembly Instructions AI-291

<b>Connector Type</b> SMP FEMALE RIGHT ANGLE CAPTIVATED CONTACT  Solder Attachment	<b>Cable Type</b> S/R .086 & .086 LL	<b>Connector Components</b> 	<b>Tools Required</b> Fixture Base T-6053 Contact T-6290 Positioning Tool T-6292 Locator Tool T-6292 Clamp Insert T-6055-2	<b>Connector P/N</b> P652-2CC P652-4CC P652-6CC P652-8CC
<b>Procedure 1</b>	<b>Preparation of Components</b>  1. Trim outer conductor and dielectric to dimension shown. 2. Align cross hole in center contact with hole in connector by rotating contact from interface end.			
<b>Procedure 2</b>	<b>Attach Cable to Center Conductor</b>  1. Install contact positioning tool on interface of connector. 2. Insert cable into connector body. Cable center conductor must engage center contact of connector as shown			
<b>Procedure 3</b>	<b>Attach Cable to Connector</b>  1. Fixture as shown. 2. Solder as shown. Temperature must not exceed 550°F. 3. Allow to cool. Clean solder joint and remove excess flux.			
<b>Procedure 4</b>	<b>Install Cap</b>  1. Insert cap with countersink going into connector body. 2. Using fixture as shown, Press cap until seated. Cap should not protrude more than .001".			
<b>Procedure 5</b>	<b>Inspection of Completed Connector Assembly</b>  1. Adherence to the above steps will yield tolerances shown.			

# Assembly Instructions AI-292

Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
<p>SMP Female Straight Solder on Contact</p> <p>Solder Attachment</p>	<p>S/R .086 &amp; .086 LL</p>		<p>Soldering Gauge Fixture Base Center Contact Holder Locator Tool Clamp Insert</p>	<p>T-6052-7 T-6053 T-6057 T-6295-1 T-6055-2</p>	<p>P651-2CC P651-4CC P651-6CC P651-8CC</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>Trim outer conductor and dielectric to dimension shown.</li> </ol>				
<p><b>Procedure 2</b></p>	<p><b>Attach Center Conductor to Cable</b></p> <ol style="list-style-type: none"> <li>Slide center conductor over cable inner conductor and seat firmly against soldering gauge.</li> <li>Locate contact as shown and Solder contact. Temperature should not exceed 550° F.</li> <li>Allow to cool. Remove excess solder.</li> </ol>				
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>Install connector subassembly in locator tool.</li> <li>Locate on end of cable. Tighten locator tool gently to secure joint.</li> <li>Solder connector to cable. Do not overheat. Temperature must not exceed 550° F.</li> <li>Clean solder joint and remove excess flux.</li> </ol>				
<p><b>Procedure 4</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>Adherence to the above steps will yield tolerances shown.</li> </ol>	 <p>+0.000/-0.008 CENTER CONDUCTOR +0.000/-0.010 INSULATOR R.P.</p>			

# Assembly Instructions AI-293

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMP MALE HERMETIC			Locator Tool T-6296-1 T-6296-2 T-6296-3	PART NUMBER P680-1 P680-2 P680-3
Solder Attachment				

**1**

MOUNT P680 ON LOCATOR TOOL AS SHOWN.

**2**

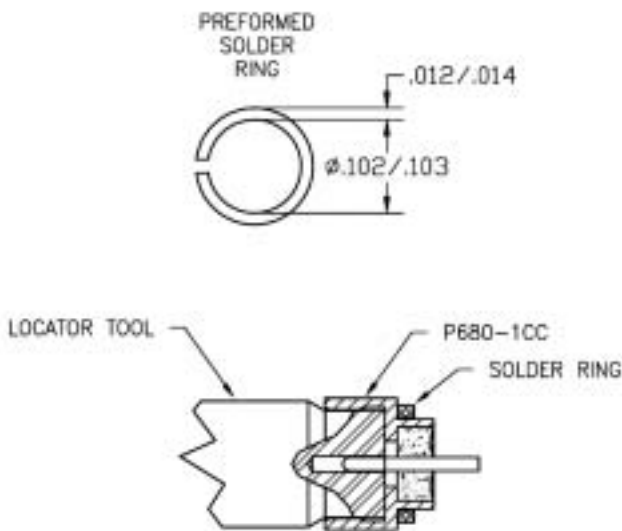
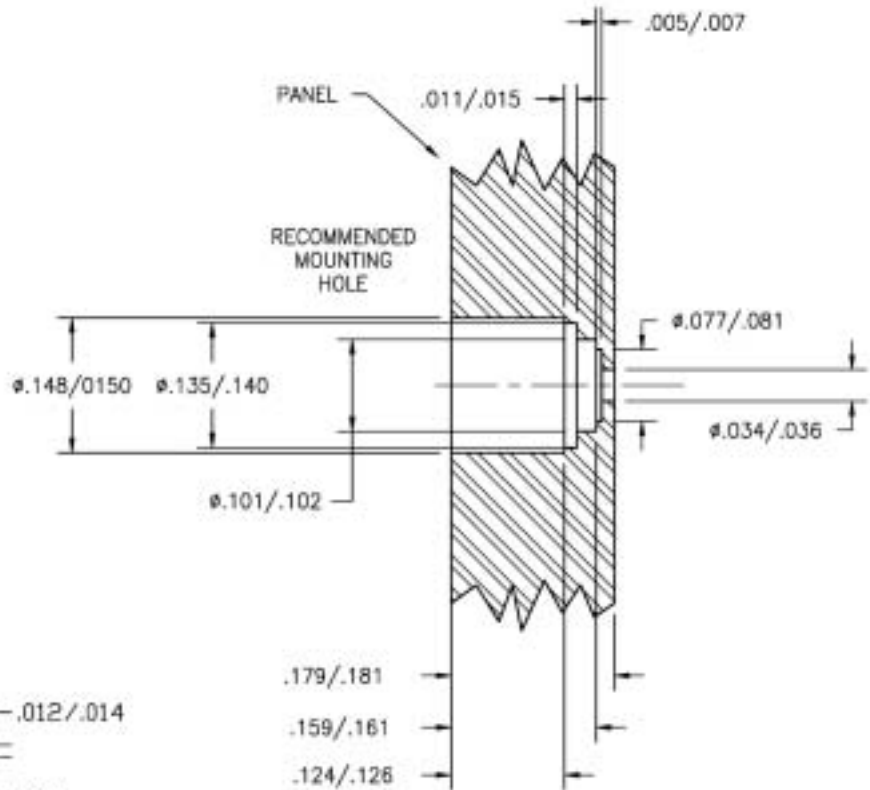
INSTALL SOLDER RING ON P680 AS SHOWN.

**3**

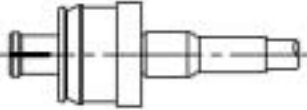

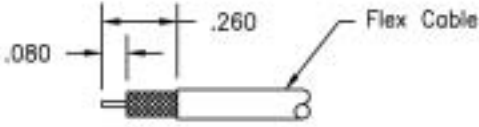
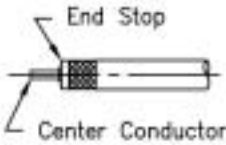
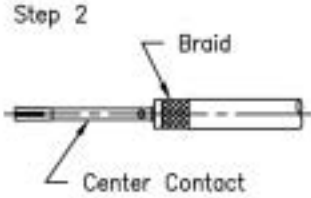
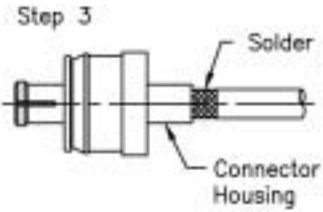
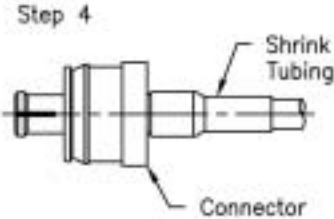
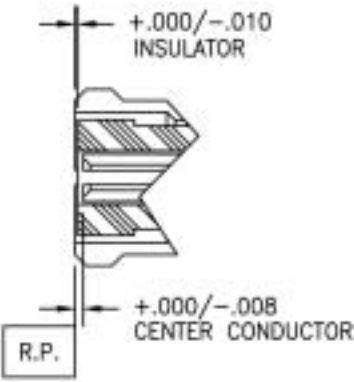
INSERT LOCATOR TOOL WITH P680 AND SOLDER RING INTO PANEL AS SHOWN.

**4**

SOLDER INTO PLACE.


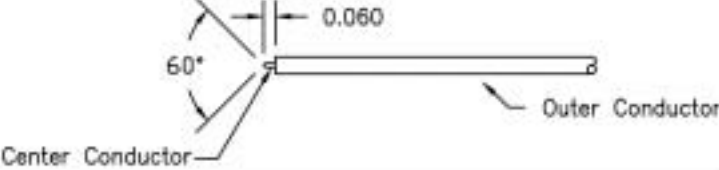
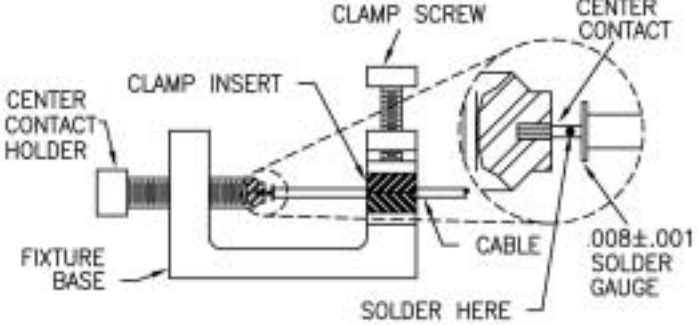
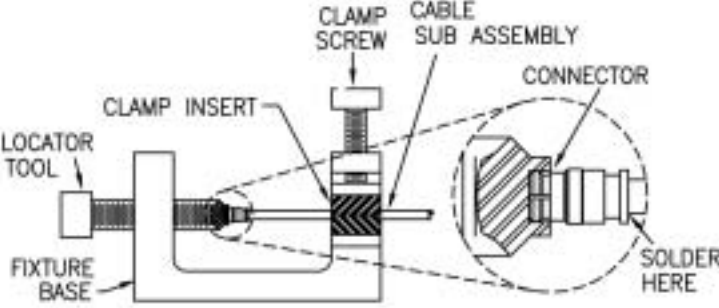
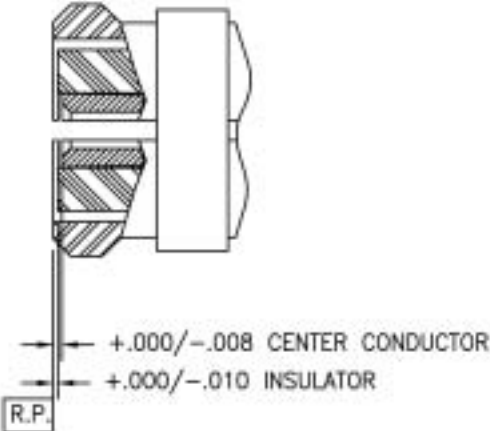


# Assembly Instructions AI-297

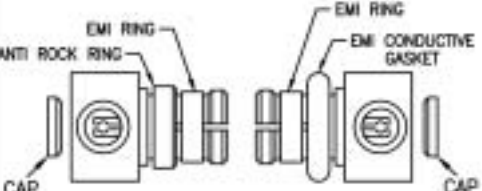
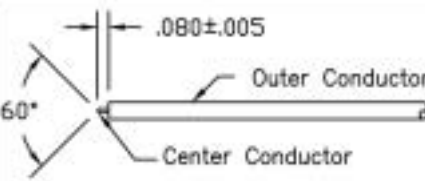
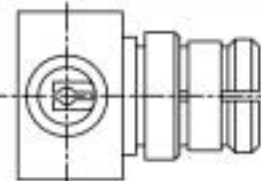
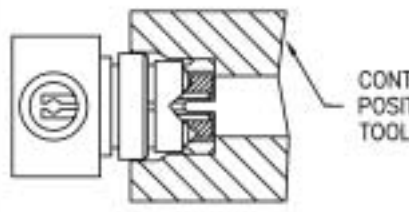
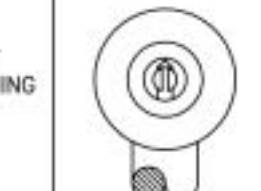
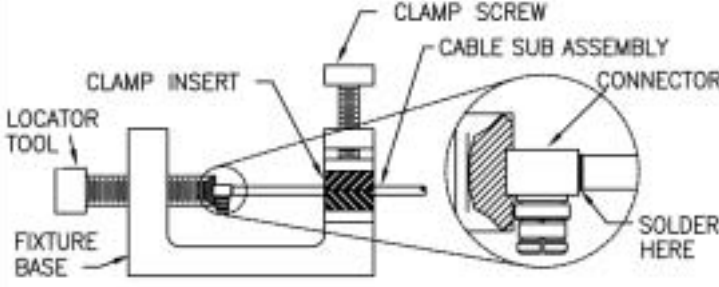
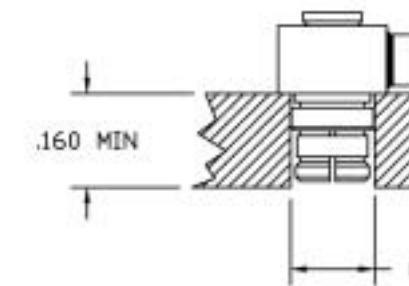
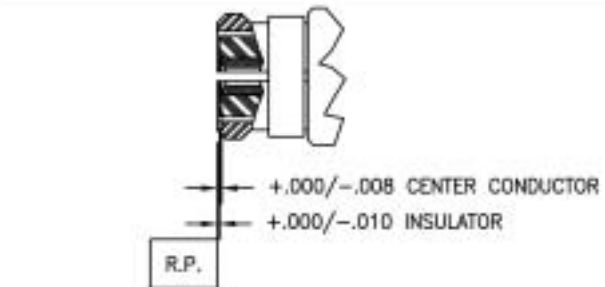
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMP Female Float Mount to Flex Cable	1. Micro coax UFF 092A 2. RG316/U		No special tools required.	P658-1CC P658-2CC
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Prepare cable end as shown. 2. Dip stripped end into solder pot for 3-5 seconds and allow solder to wet braid. Solder pot temp to be at 500°F. 3. Trim dielectric and expose center conductor as shown.	Step 1 & 2  Step 3 		
<b>Procedure 2</b>	<b>Attach Cable to Housing</b> 1. Install dielectric end stop over cable center conductor in the orientation shown. 2. Place center contact over the center conductor of cable. Push flush to end stop. Solder in place. 3. Insert cable into connector housing. Solder in place. 4. Slide heat shrink tubing to back end of connector housing. Shrink into place. Ensure that strain relief does not impede connector's "float" movement.	Step 1  Step 2  Step 3  Step 4 		
<b>Procedure 3</b>	<b>Inspection of Completed Connector Assembly</b> 1. Adherence to the above steps will yield tolerances shown.			



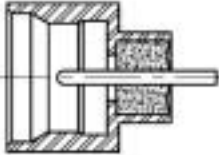
# Assembly Instructions AI-300

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMP FEMALE STRAIGHT SOLDER ON CONTACT</p> <p>Solder Attachment</p>	<p>S/R .047 &amp; .047 LL</p>		<p>Soldering Gauge T-6052-7                      Fixture Base T-6053                      Center Contact T-6057                      Holder                      Locator Tool T-6295                      Clamp Insert T-6055-3</p>	<p>P651-1CC                      P651-3CC                      P651-5CC                      P651-7CC</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>Trim outer conductor and dielectric to dimension shown.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Attach Center Conductor to Cable</b></p> <ol style="list-style-type: none"> <li>Slide center conductor over cable inner conductor and seat firmly against soldering gauge.</li> <li>Locate contact as shown and Solder contact. Temperature should not exceed 550° F.</li> <li>Allow to cool. Remove excess solder.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>Install connector subassembly in locator tool.</li> <li>Locate an end of cable. Tighten locator tool gently to secure joint.</li> <li>Solder connector to cable. Do not overheat. Temperature must not exceed 550° F.</li> <li>Clean solder joint and remove excess flux.</li> </ol>			
<p><b>Procedure 4</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>Adherence to the above steps will yield tolerances shown.</li> </ol>			

# Assembly Instructions AI-301

<b>Connector Type</b> SMP FEMALE RIGHT ANGLE CAPTIVATED CONTACT  Solder Attachment	<b>Cable Type</b> S/R .047 & .047 LL	<b>Connector Components</b> 	<b>Tools Required</b> Fixture Base T-6053 Contact Positioning Tool T-6290 Locator Tool T-6292 Clamp Insert T-6055-3	<b>Connector P/N</b> P652-1CC P652-3CC P652-5CC P652-7CC
<b>Procedure 1</b>	<b>Preparation of Components</b> 1. Trim outer conductor and dielectric to dimension shown. 2. Align cross hole in center contact with hole in connector by rotating contact from interface end.			
<b>Procedure 2</b>	<b>Attach Cable to Center Conductor</b> 1. Install contact positioning tool on interface of connector. 2. Insert cable into connector body. Cable center conductor must engage center contact of connector as shown.			
<b>Procedure 3</b>	<b>Attach Cable to Connector</b> 1. Fixture as shown. 2. Solder as shown. Temperature must not exceed 550°F. 3. Allow to cool. Clean solder joint and remove excess flux.			
<b>Procedure 4</b>	<b>Install Cap</b> 1. Insert cap with countersink going into connector body. 2. Using fixture as shown. Press cap until seated. Cap should not protrude more than .001".			
<b>Procedure 5</b>	<b>Inspection of Completed Connector Assembly</b> 1. Adherence to the above steps will yield tolerances shown.			

# Assembly Instructions AI-302

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMP MALE HERMETIC			Locator Tool T-6296-1 T-6296-2 T-6296-3	PART NUMBER P681-1 P681-2 P681-3
Solder Attachment				

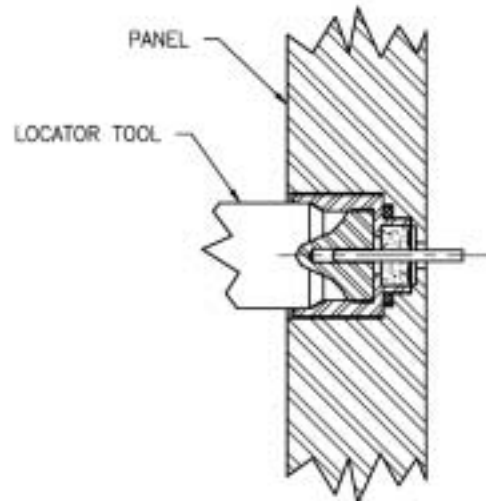
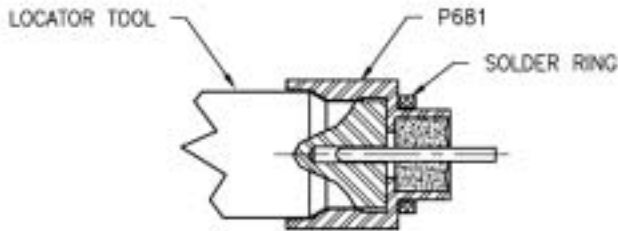
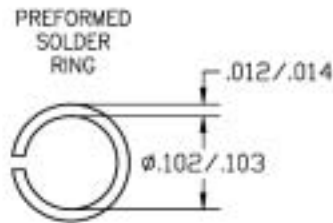
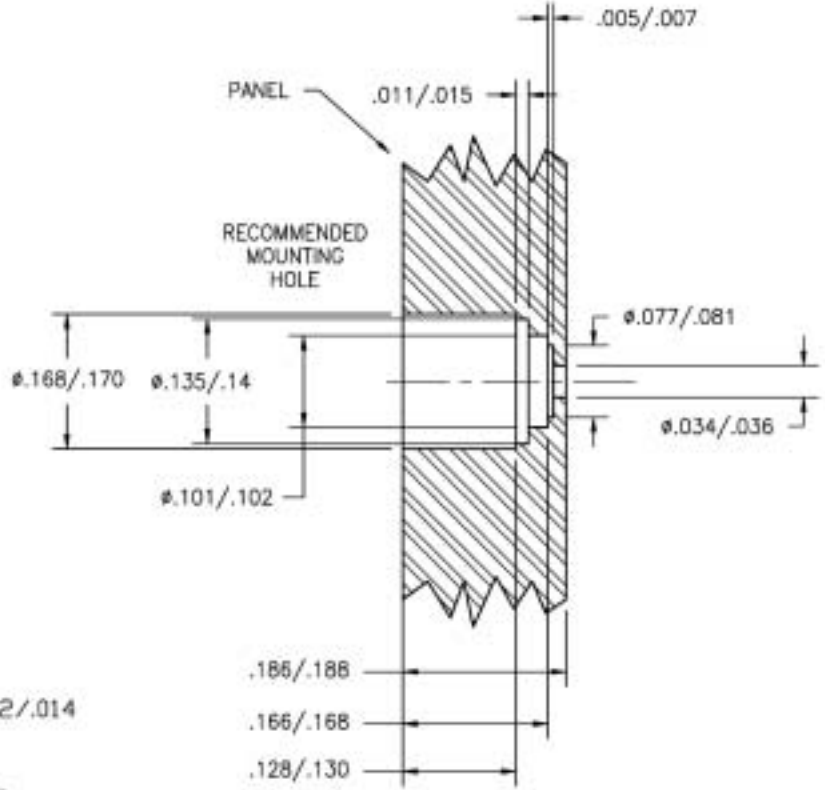
- 1
- 2
- 3
- 4

MOUNT P681 ON LOCATOR TOOL AS SHOWN

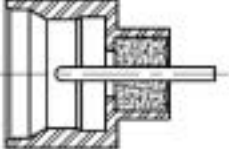
INSTALL SOLDER RING ON P681 AS SHOWN

INSERT LOCATOR TOOL WITH P681 AND SOLDER RING INTO PANEL AS SHOWN.

SOLDER INTO PLACE.



# Assembly Instructions AI-303

Connector Type SMP MALE HERMETIC  Solder Attachment	Cable Type	Connector Components 	Tools Required Locator Tool T-6296-1 T-6296-2 T-6296-3	Connector P/N PART NUMBER P682-1 P682-2 P682-3
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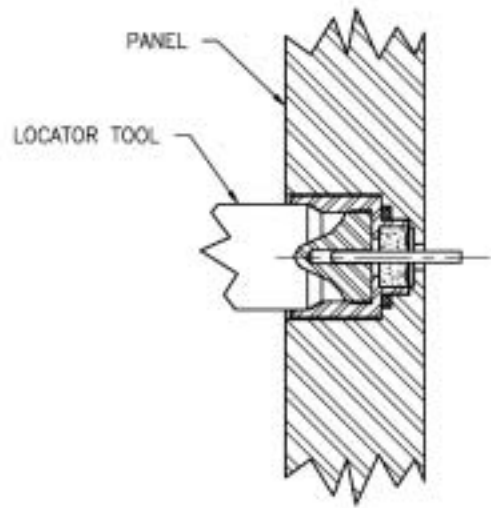
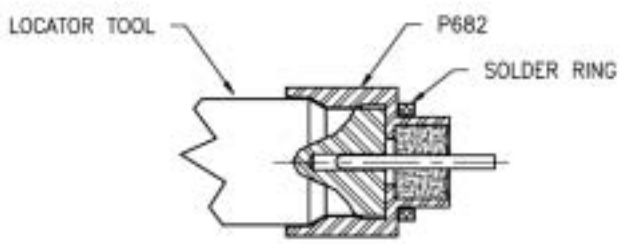
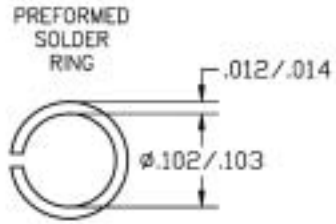
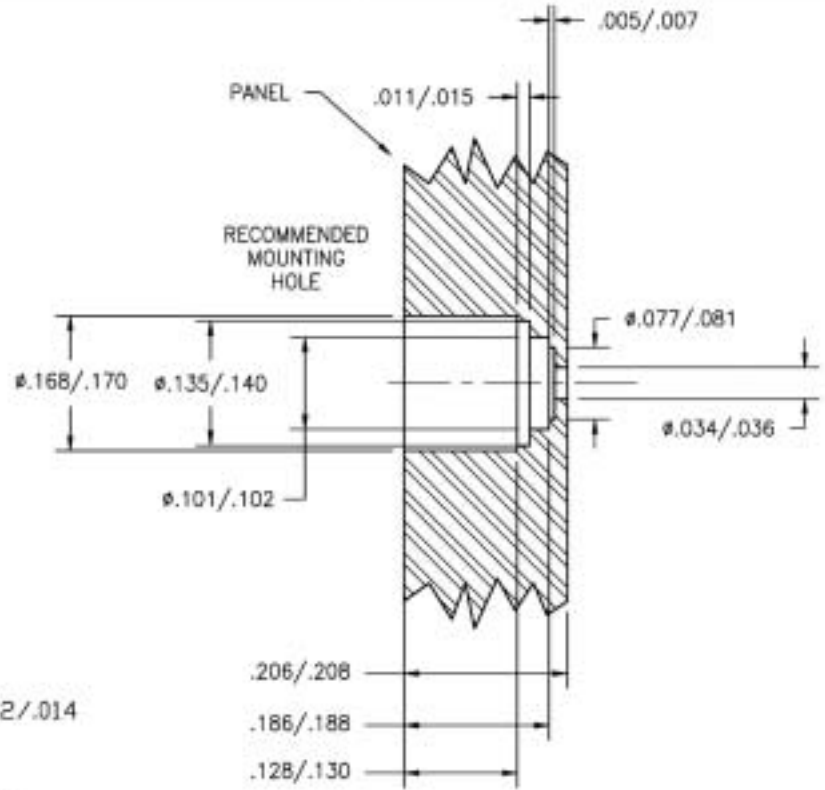
- 1
- 2
- 3
- 4

MOUNT P682 ON LOCATOR TOOL AS SHOWN

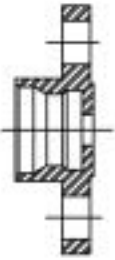
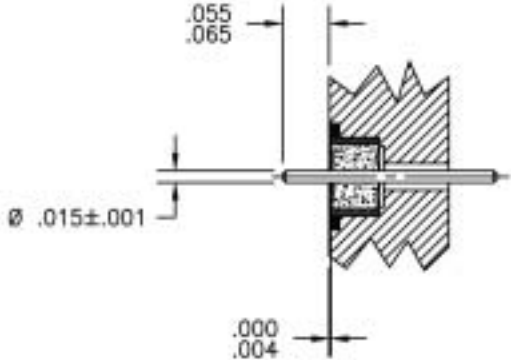
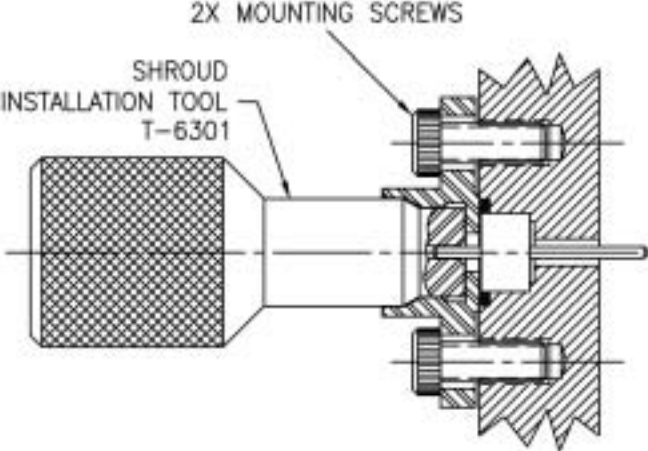
INSTALL SOLDER RING ON P682 AS SHOWN

INSERT LOCATOR TOOL WITH P682 AND SOLDER RING INTO PANEL AS SHOWN.

SOLDER INTO PLACE.


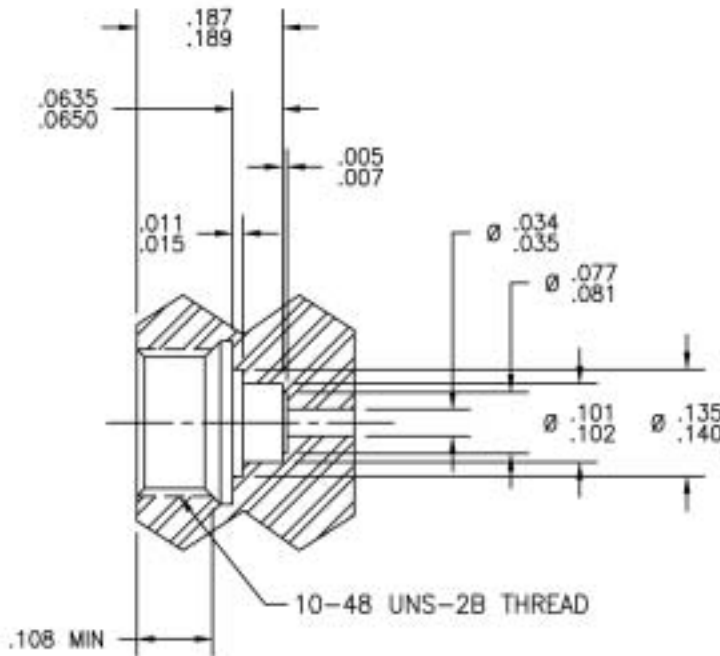
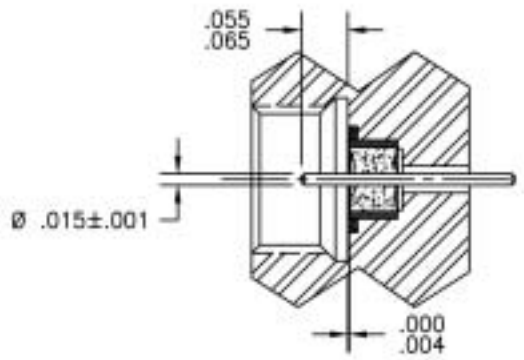
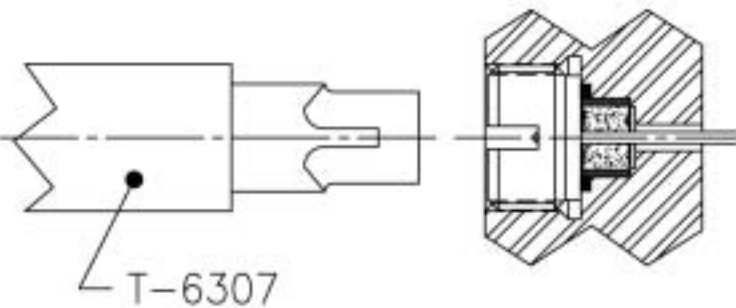


# Assembly Instructions AI-305

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N										
SMP SHROUD			INSTALLATION TOOL T-6301-1 T-6301-2 T-6301-3	P670 P671 P672 P673										
<b>Procedure</b>  <b>1</b>	<b>Installation of 50 Ohm Seal</b>  1. Install (Tensolite 4004-9) into panel as per instruction AI-304													
<b>Procedure</b>  <b>2</b>	<b>Installation of Shroud</b>  1. Install shroud onto seal using the installation tool as illustrated.	<table border="1" data-bbox="386 1222 630 1472"> <thead> <tr> <th>P/N</th> <th>TOOL</th> </tr> </thead> <tbody> <tr> <td>P670</td> <td>T-6301-1</td> </tr> <tr> <td>P671</td> <td>T-6301-2</td> </tr> <tr> <td>P672</td> <td>T-6301-3</td> </tr> <tr> <td>P673</td> <td>T-6301-2</td> </tr> </tbody> </table>	P/N	TOOL	P670	T-6301-1	P671	T-6301-2	P672	T-6301-3	P673	T-6301-2		
P/N	TOOL													
P670	T-6301-1													
P671	T-6301-2													
P672	T-6301-3													
P673	T-6301-2													


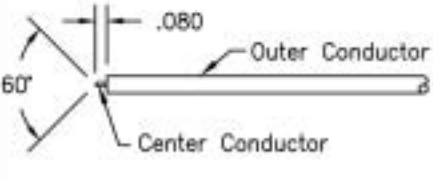
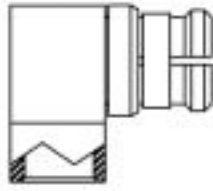
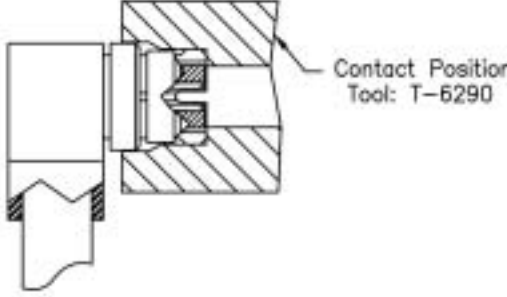
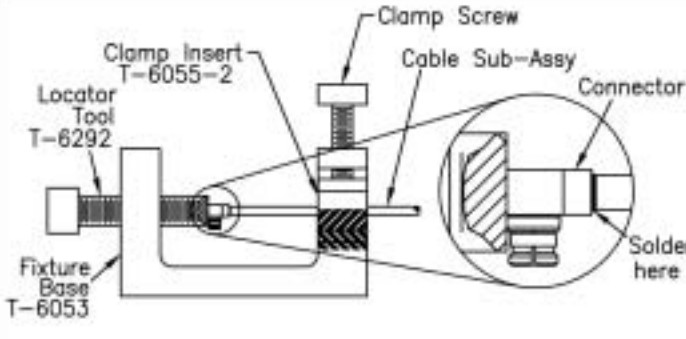
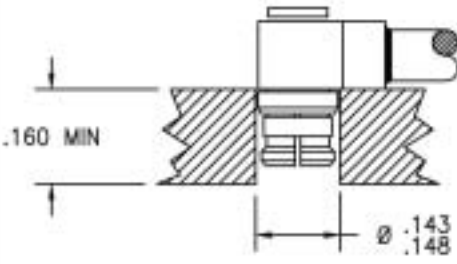
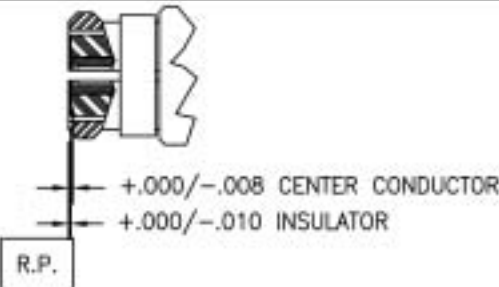


# Assembly Instructions AI-306

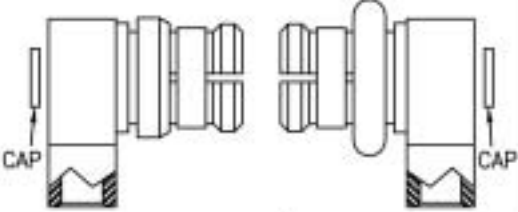
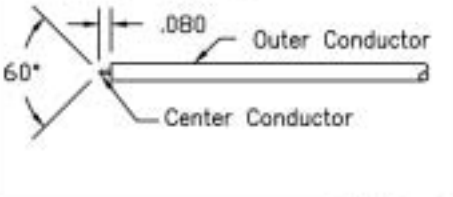
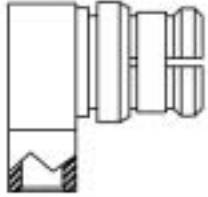
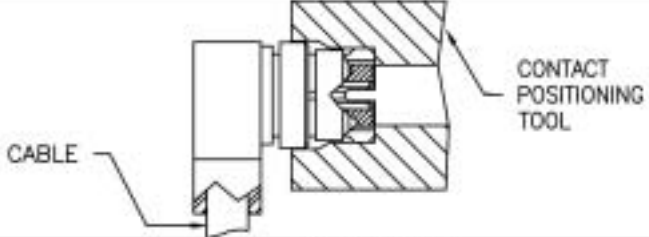
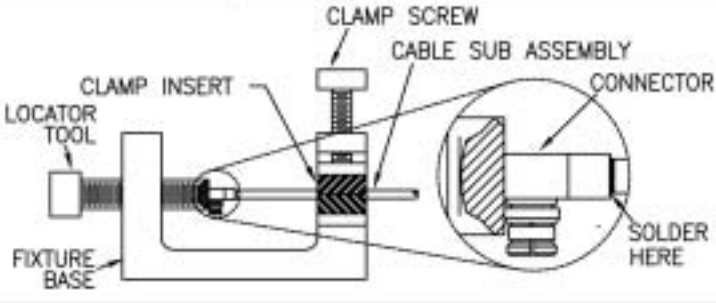
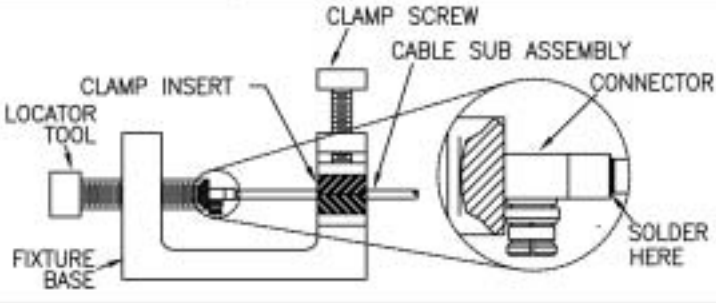
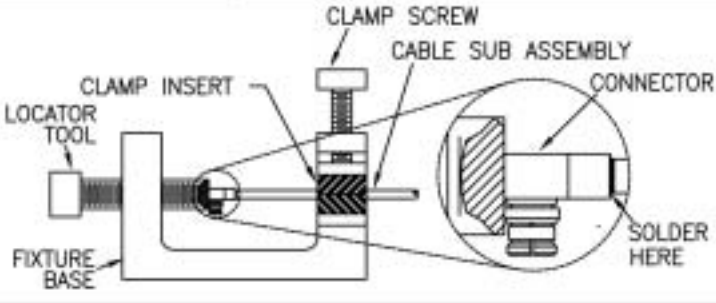
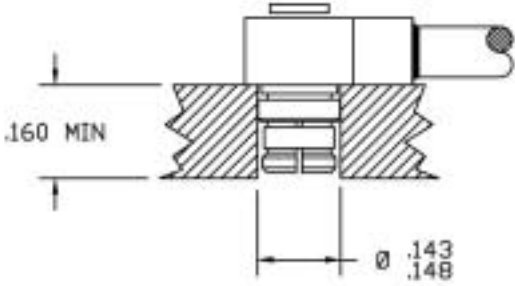
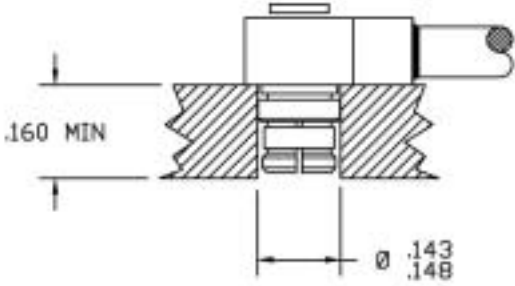
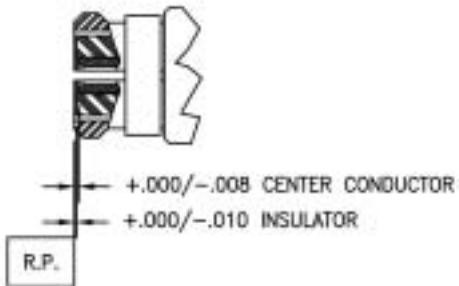
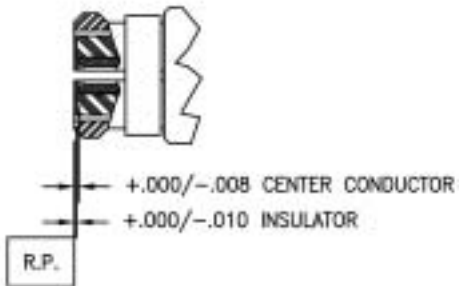
<b>Connector Type</b>  THREAD-IN SMP SHROUD	<b>Cable Type</b>	<b>Connector Components</b>  	<b>Tools Required</b>  INSTALLATION TOOL T-6306 INSTALLATION TOOL T-6307-1 T-6307-2 T-6307-3	<b>Connector P/N</b>  P676-1 P676-2 P676-3
<b>Procedure 1</b>	<b>Mounting Hole Configuration</b>			
<b>Procedure 2</b>	<b>Seal Installation</b>  1. Install seal per AI-304. Using Tensolite tool P/N T-6306			
<b>Procedure 3</b>	<b>Shroud Installation</b>  1. Install shroud by threading into housing. 2. Use T-6307 to torque to 8-10 inch pounds.			

P/N	TOOL
P676-1	T-6307-1
P676-2	T-6307-2
P676-3	T-6307-3

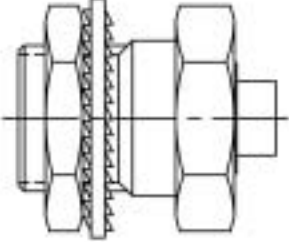
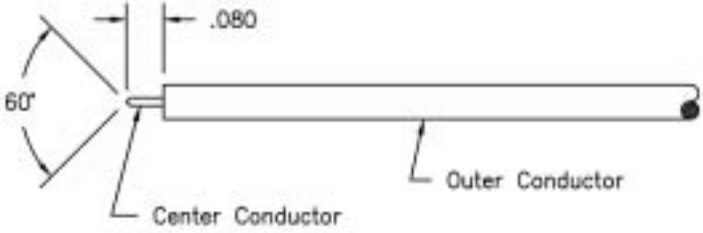
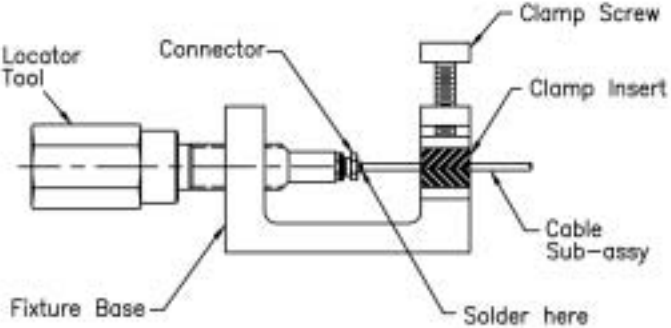
# Assembly Instructions AI-307

Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
<p>SMA Female Radius R/A Captivated Contact Solder Attachment</p>	<p>S/R .086 &amp; .086 LL</p>		<p>Fixture Base: Contact Position Tool: Locator Tool: Clamp Insert:</p>	<p>T-6053 T-6290 T-6292 T-6055-2</p>	<p>P659-2CC P659-4CC P659-6CC P659-8CC</p>
<p><b>Procedure</b></p> <p><b>1</b></p>	<p><b>Preparation of Components</b></p> <ol style="list-style-type: none"> <li>Trim outer conductor and dielectric to dimension shown.</li> <li>Align cross hole in center contact with hole in connector by rotating contact from interface end.</li> </ol>				
<p><b>Procedure</b></p> <p><b>2</b></p>	<p><b>Attach Cable to Center Conductor</b></p> <ol style="list-style-type: none"> <li>Install contact positioning tool on interface of connector.</li> <li>Insert cable into connector body. Cable center conductor must engage center contact of connector as shown.</li> </ol>		<p>Contact Position Tool: T-6290</p>		
<p><b>Procedure</b></p> <p><b>3</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>Remove contact position tool.</li> <li>Mount sub-assembly into fixture as shown.</li> <li>Solder as shown. Temperature must not exceed 550° F.</li> <li>Allow to cool. Clean solder joint and remove excess flux.</li> </ol>		<p>Clamp Screw Clamp Insert T-6055-2 Cable Sub-Assy Connector Solder here Locator Tool T-6292 Fixture Base T-6053</p>		
<p><b>Procedure</b></p> <p><b>4</b></p>	<p><b>Install Cap</b></p> <ol style="list-style-type: none"> <li>Using fixture as shown. Press cap until seated. Cap should not protrude more than .001".</li> </ol>		<p>.160 MIN Ø .143 .148</p>		
<p><b>Procedure</b></p> <p><b>5</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>Adherence to the above steps will yield tolerances shown.</li> </ol>		<p>+ .000 / - .008 CENTER CONDUCTOR + .000 / - .010 INSULATOR R.P.</p>		

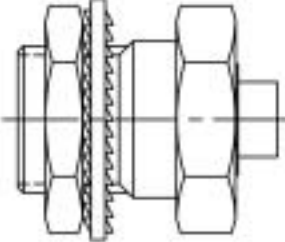
# Assembly Instructions AI-308

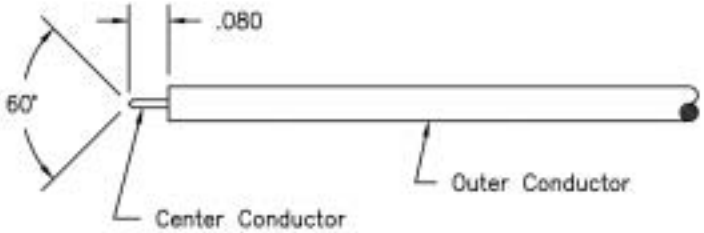
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMP FEMALE RIGHT ANGLE CAPTIVATED CONTACT  Solder Attachment	Ø .047 SEMI-FLEX Ø .047 SEMI-RIGID Ø .047 LOW-LOSS		Fixture Base T-6053 Contact T-6290 Positioning Tool Locator Tool T-6292 Clamp Insert T-6055-3	P659-1CC P659-3CC P659-5CC P659-7CC
<b>Procedure 1</b>	<b>Preparation of Components</b>  1. Trim outer conductor and dielectric to dimension shown. 2. Align cross hole in center contact with hole in connector by rotating contact from interface end.			
<b>Procedure 2</b>	<b>Attach Cable to Center Conductor</b>  1. Install contact positioning tool on interface of connector. 2. Insert cable into connector body. Cable center conductor must engage center contact of connector as shown			
<b>Procedure 3</b>	<b>Attach Cable to Connector</b>  1. Fixture as shown. 2. Solder as shown. Temperature must not exceed 550°F. 3. Allow to cool. Clean solder joint and remove excess flux.			
<b>Procedure 4</b>	<b>Install Cap</b>  1. Using fixture as shown. Press cap until seated. Cap should not protrude more than .001".			
<b>Procedure 5</b>	<b>Inspection of Completed Connector Assembly</b>  1. Adherence to the above steps will yield tolerances shown.			

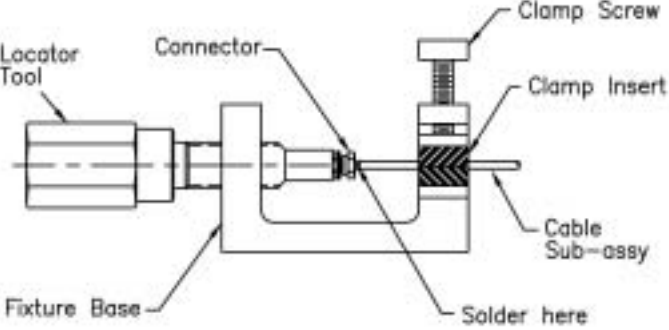
# Assembly Instructions AI-309

Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
SMP Male Straight Captivated Contact  Solder Attachment	S/R .086 & .086 LL		Fixture Base Locator Tool Clamp Insert	T-6053 T-6295-1 T-6055-2	P660-4CC P660-5CC P660-6CC P660-10CC P660-11CC P660-12CC
<b>Procedure</b>  <b>1</b>	<b>Preparation of Cable</b>  1. Trim outer conductor and dielectric to dimension shown.				
<b>Procedure</b>  <b>2</b>	<b>Attach Cable to Connector</b>  1. Install connector subassembly in locator tool. 2. Locate on end of cable. Tighten locator tool gently to secure joint. 3. Solder connector to cable. Do not overheat. Temperature must not exceed 550° F. 4. Clean solder joint and remove excess flux.				

# Assembly Instructions AI-310

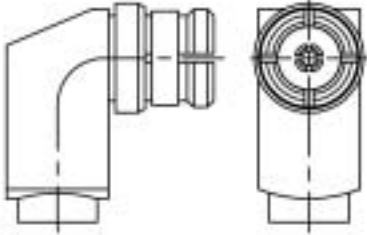
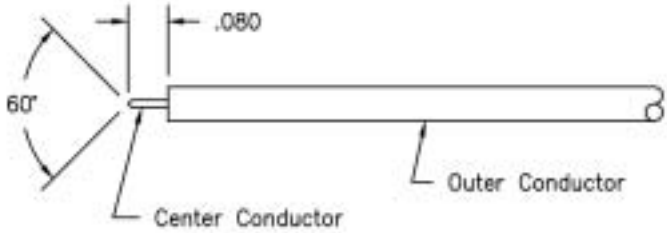
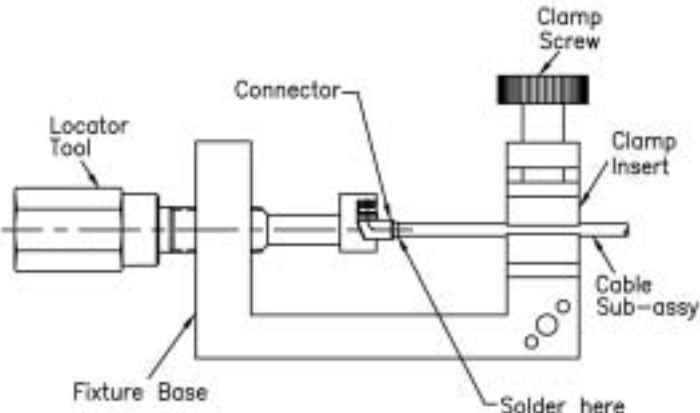
<b>Connector Type</b>  SMP Male Straight Captivated Contact  Solder Attachment	<b>Cable Type</b>  S/R .047 & .047 LL	<b>Connector Components</b>  	<b>Tools Required</b>  Fixture Base Locator Tool Clamp Insert	<b>P/N</b>  T-6053 T-6295-1 T-6055-3	<b>Connector P/N</b>  P660-1CC P660-2CC P660-3CC P660-7CC P660-8CC P660-9CC
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<b>Procedure</b>  <div style="font-size: 2em; font-weight: bold; color: blue; text-align: center;">1</div>	<b>Preparation of Cable</b>  1. Trim outer conductor and dielectric to dimension shown.	
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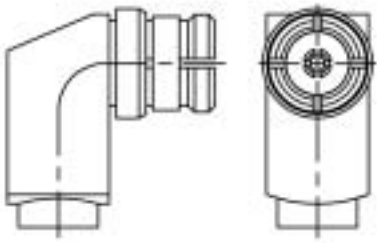
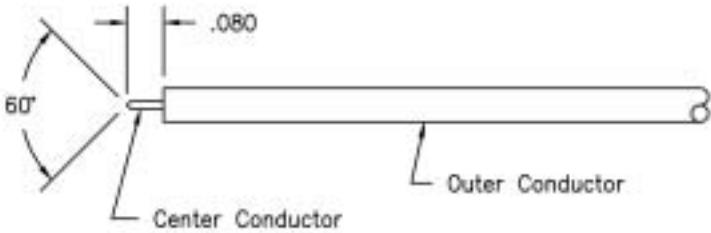
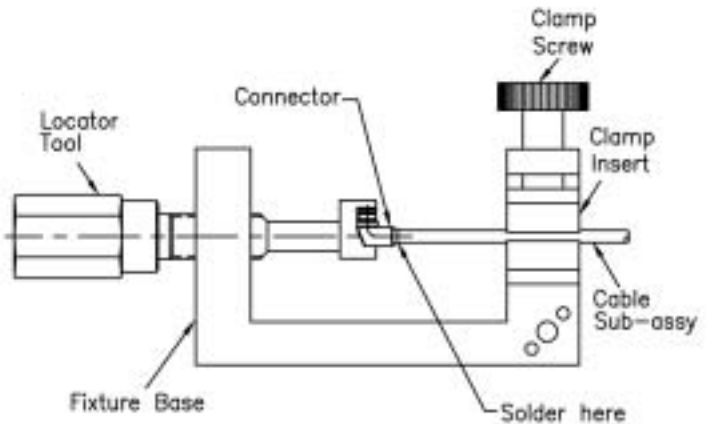
<b>Procedure</b>  <div style="font-size: 2em; font-weight: bold; color: blue; text-align: center;">2</div>	<b>Attach Cable to Connector</b>  1. Install connector subassembly in locator tool. 2. Locate an end of cable. Tighten locator tool gently to secure joint. 3. Solder connector to cable. Do not overheat. Temperature must not exceed 550° F. 4. Clean solder joint and remove excess flux.	
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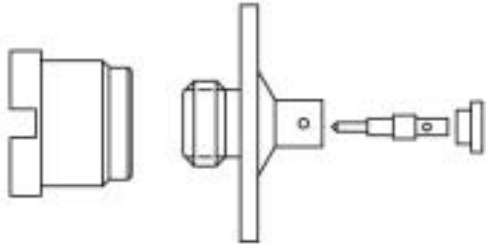
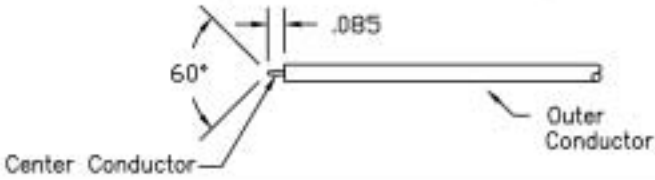
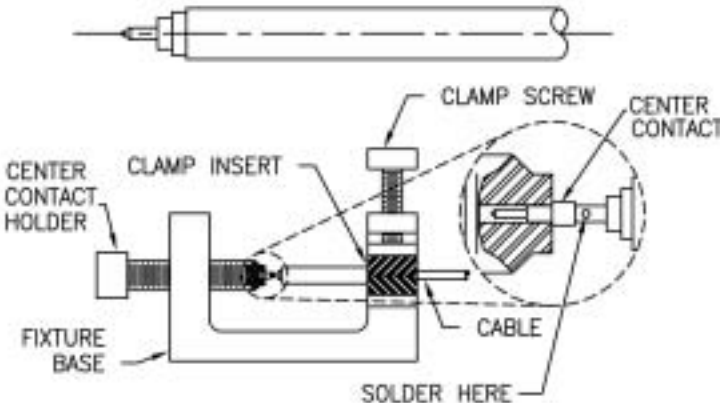
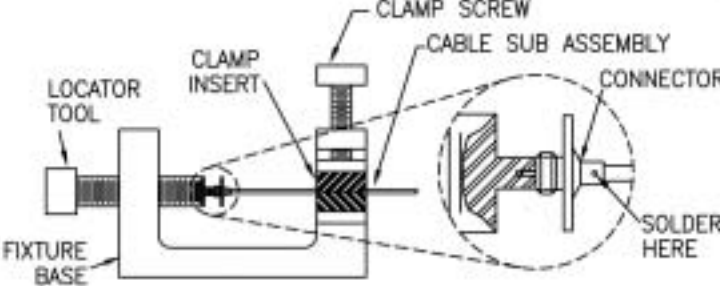
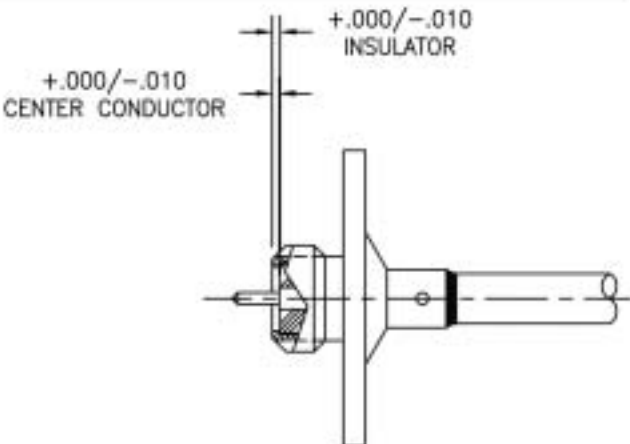
# Assembly Instructions AI-311

Connector Type	Cable Type	Connector Components	Tools Required	P/N	Connector P/N
SMP Male Straight Captivated Contact  Solder Attachment	S/R .085 & .085 L/L		Fixture Base Locator Tool Clamp Insert	T-6053 T-6295 T-6055-2	P655-2CC P655-4CC P655-6CC P655-8CC
<b>Procedure 1</b>	<b>Preparation of Cable</b>  1. Trim outer conductor and dielectric to dimension shown.				
<b>Procedure 2</b>	<b>Attach Cable to Connector</b>  1. Install connector sub-assembly in locator tool. 2. Locate on end of cable. Tighten locator tool gently to secure joint. 3. Solder connector to cable. Do not overheat. Temperature must not exceed 550° F. 4. Clean solder joint and remove excess flux.				

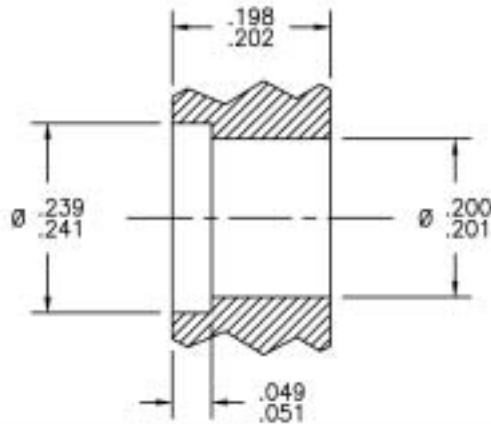
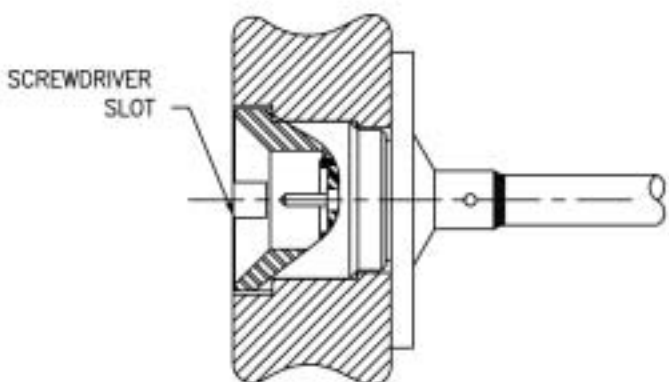
# Assembly Instructions AI-312

<b>Connector Type</b>  SMP Male Straight Captivated Contact  Solder Attachment	<b>Cable Type</b>  S/R .047 & .047 L/L	<b>Connector Components</b>  	<b>Tools Required</b>  Fixture Base Locator Tool Clamp Insert	<b>P/N</b>  T-6053 T-6295 T-6055-2	<b>Connector P/N</b>  P655-1CC P655-3CC P655-5CC P655-7CC
<b>Procedure</b>  <div style="font-size: 2em; font-weight: bold; color: #00AEEF; text-align: center;">1</div>	<b>Preparation of Cable</b>  1. Trim outer conductor and dielectric to dimension shown.				
<b>Procedure</b>  <div style="font-size: 2em; font-weight: bold; color: #00AEEF; text-align: center;">2</div>	<b>Attach Cable to Connector</b>  1. Install connector sub-assembly in locator tool. 2. Locate on end of cable. Tighten locator tool gently to secure joint. 3. Solder connector to cable. Do not overheat. Temperature must not exceed 550° F. 4. Clean solder joint and remove excess flux.				

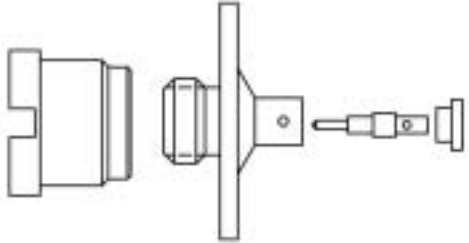
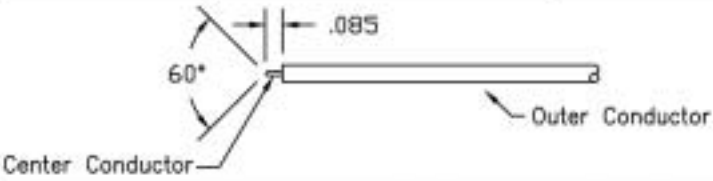
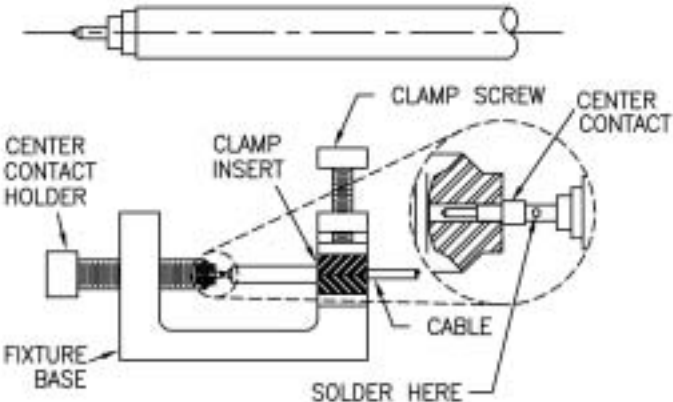
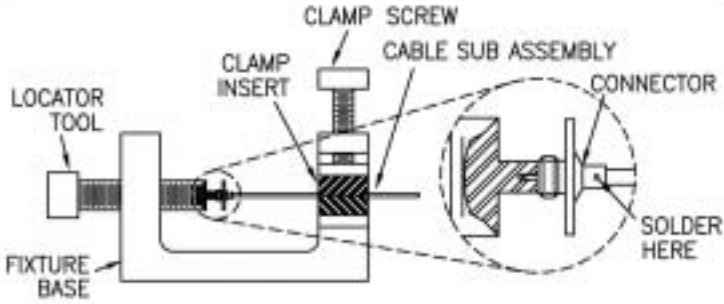
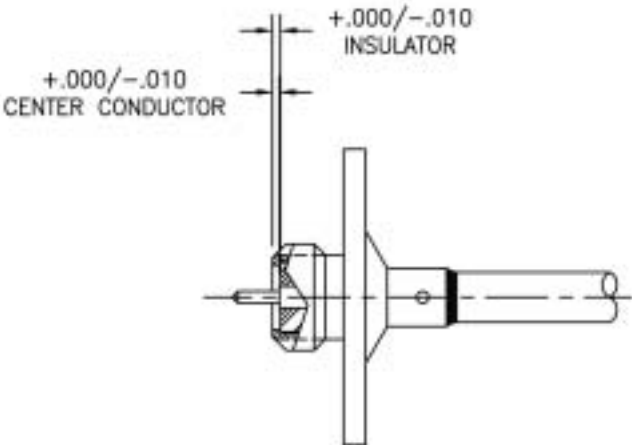
# Assembly Instructions AI-313 (1)

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
SMP FEMALE STRAIGHT SOLDER ON CONTACT  Solder Attachment	S/R .086 & .086 LL		Fixture Base T-6053 Center Contact Holder T-6307 Locator Tool T-6308 Clamp Insert T-6055-2	P662-2CC P662-4CC P662-6CC P662-8CC
<b>Procedure 1</b>	<b>Preparation of Cable</b>  1. Trim outer conductor and dielectric to dimension shown.			
<b>Procedure 2</b>	<b>Attach Center Conductor to Cable</b>  1. Install dielectric end stop over cable center conductor in the orientation shown. 2. Place center contact over in center conductor of cable push flush to end stop. Solder in place as shown, temperature should not exceed 550°F. 3. Allow to cool. Remove excess solder.			
<b>Procedure 3</b>	<b>Attach Cable to Connector</b>  1. Install connector subassembly in locator tool. 2. Locate on end of cable. Tighten locator tool gently to secure joint. 3. Solder connector to cable. Do not overheat. Temperature must not exceed 550° F. 4. Clean solder joint and remove excess flux.			
<b>Procedure 4</b>	<b>Inspection of Completed Connector Assembly</b>  1. Adherence to the above steps will yield tolerances shown.			

# Assembly Instructions AI-313 (2)

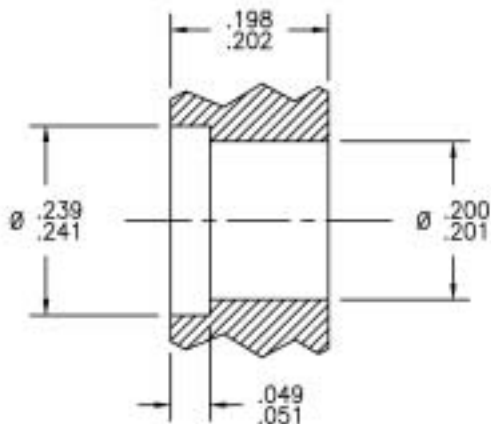
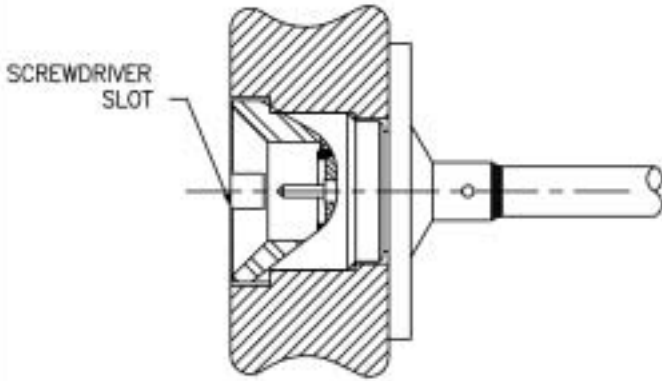
<p><b>Procedure</b></p> <p><b>5</b></p>	<p><b>Mounting Hole Dimensions</b></p>	 <p>A technical drawing of a mounting hole in a cross-section. The drawing shows a central hole with a diameter of <math>\varnothing .239</math> to <math>\varnothing .241</math>. The hole is surrounded by a raised section with a diameter of <math>\varnothing .200</math> to <math>\varnothing .201</math>. The thickness of the raised section is <math>.198</math> to <math>.202</math>. The distance from the center of the hole to the edge of the raised section is <math>.049</math> to <math>.051</math>.</p>
<p><b>Procedure</b></p> <p><b>6</b></p>	<p><b>Installed Configuration</b></p> <p>1. Install bulkhead mount as illustrated. Torque 6–8 inch pounds.</p>	 <p>A technical drawing showing a bulkhead mount being installed into a hole. A screwdriver is shown inserted into the mount, with a label "SCREWDRIVER SLOT" pointing to the slot. The mount is shown in a cross-section, and the screwdriver is shown driving it into the hole.</p>

# Assembly Instructions AI-314 (1)

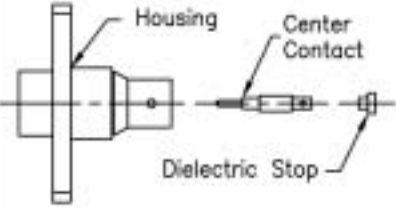
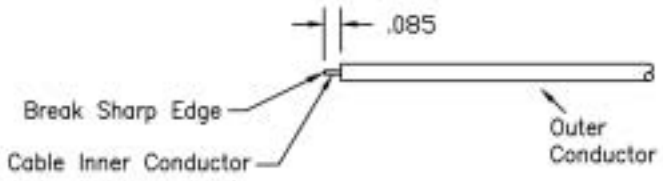
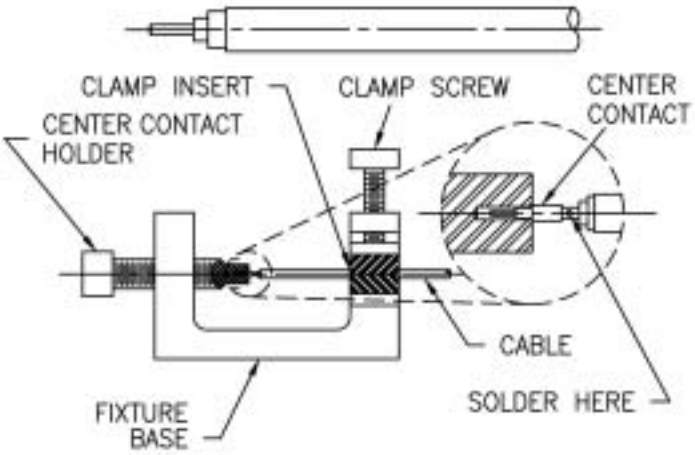
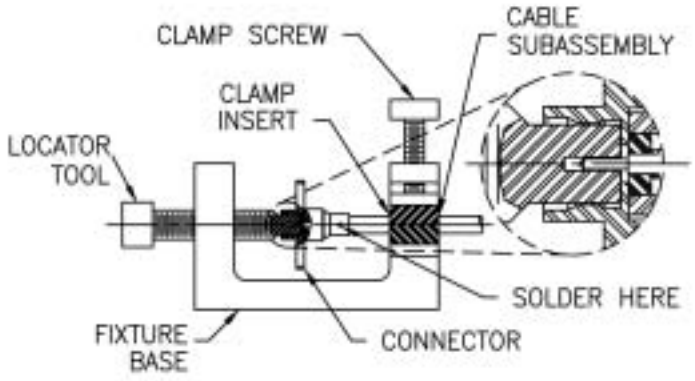
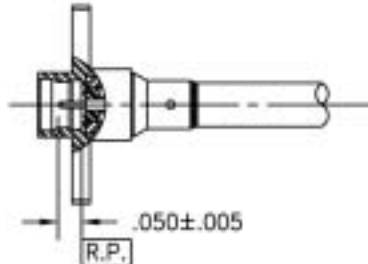
Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMP MALE STRAIGHT SOLDER ON CONTACT</p> <p>Solder Attachment</p>	<p>S/R .047 &amp; .047 LL</p>		<p>Fixture Base T-6053 Center Contact Holder T-6307 Locator Tool T-6308 Clamp Insert T-6055-3</p>	<p>P662-1CC P662-3CC P662-5CC P662-7CC</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <p>1. Trim outer conductor and dielectric to dimension shown.</p>			
<p><b>Procedure 2</b></p>	<p><b>Attach Center Conductor to Cable</b></p> <p>1. Install dielectric end stop over cable center conductor in the orientation shown. 2. Place center contact over in center conductor of cable push flush to end stop. Solder in place as shown. temperature should not exceed 550°F. 3. Allow to cool. Remove excess solder.</p>			
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Connector</b></p> <p>1. Install connector subassembly in locator tool. 2. Locate on end of cable. Tighten locator tool gently to secure joint. 3. Solder connector to cable. Do not overheat. Temperature must not exceed 550° F. 4. Clean solder joint and remove excess flux.</p>			
<p><b>Procedure 4</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <p>1. Adherence to the above steps will yield tolerances shown.</p>			



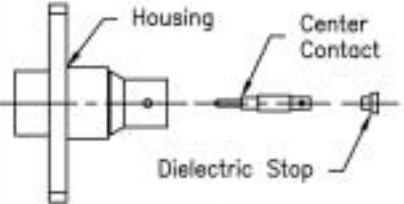
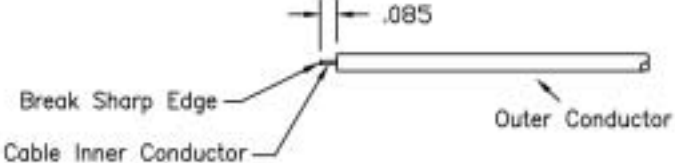
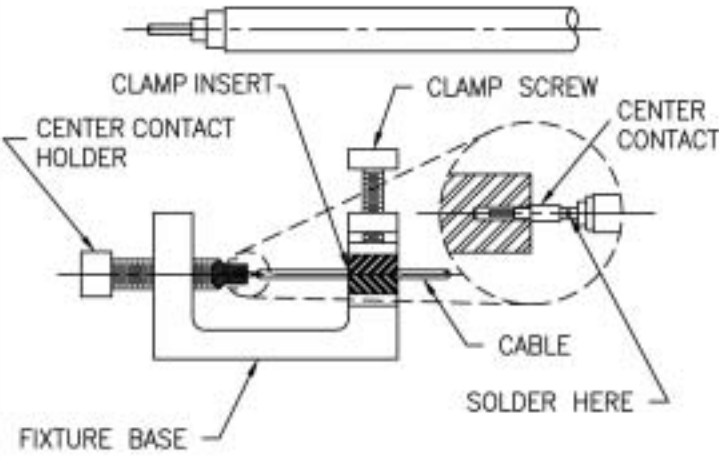
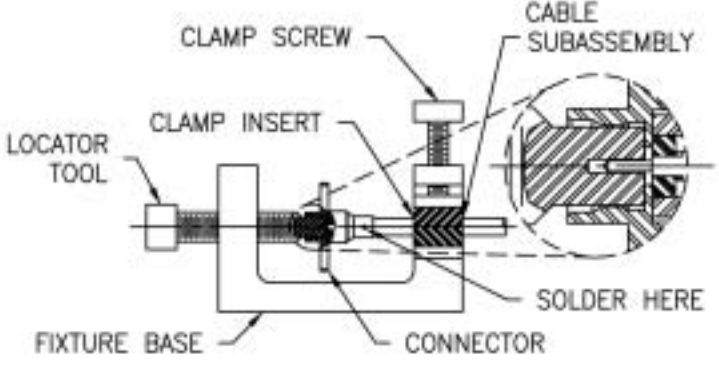
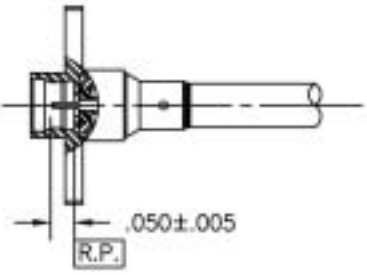
# Assembly Instructions AI-314 (2)

<p><b>Procedure</b></p> <p><b>5</b></p>	<p><b>Mounting Hole Dimensions</b></p>	 <p>Technical drawing showing the dimensions for the mounting hole. The drawing includes a central vertical hole and two side holes. The dimensions are: top hole diameter .198/.202, bottom hole diameter .198/.202, central hole diameter .239/.241, side hole diameter .200/.201, and side hole offset .049/.051.</p>
<p><b>Procedure</b></p> <p><b>6</b></p>	<p><b>Installed Configuration</b></p> <p>1. Install bulkhead mount as illustrated. Torque 6–8 inch pounds.</p>	 <p>Technical drawing showing the installed configuration of the bulkhead mount. A screwdriver is shown inserted into the side hole, with a label 'SCREWDRIVER SLOT' pointing to the slot.</p>

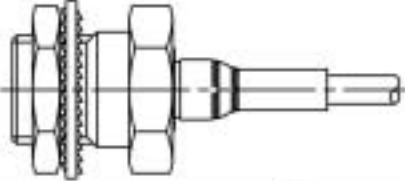
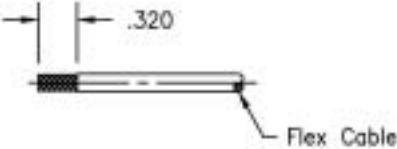
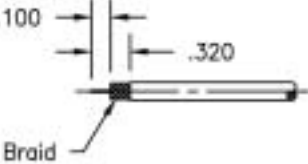
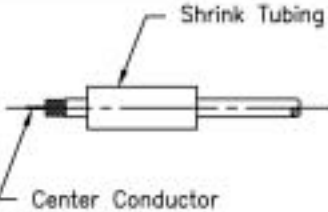
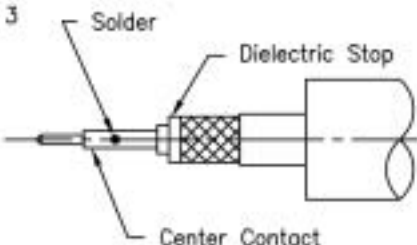
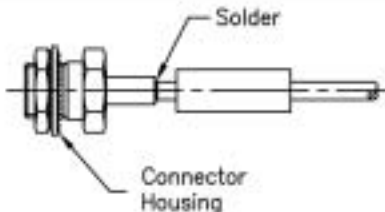
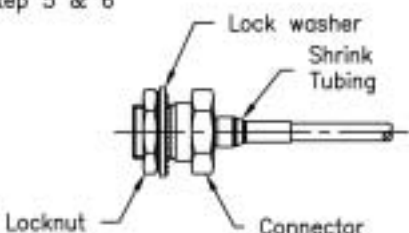
# Assembly Instructions AI-315

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMP Male Straight 2 Hole Flange Mount With Solder On Contact.</p> <p>Solder Attachment</p>	<p>Ø .085 Semi-Rigid And Low Loss Cable.</p>		<p>Fixture Base: T-6053 Center Contact Holder And Locator Tool: T-6308-1 (-4SF,-10SF) T-6308-2 (-5SF,-11SF) T-6308-3 (-6SF,-12SF,-14SF) Clamp Insert: T-6055-2</p>	<p>P664-4SF, 5SF,6SF P664-10SF, 11F,12SF P664-14SF</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Trim outer conductor and dielectric to dimension shown.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Attach Center Conductor to Cable</b></p> <ol style="list-style-type: none"> <li>1. Install dielectric stop over cable inner conductor in the orientation shown.</li> <li>2. Place center contact over center contact holder then slide over cable inner conductor until flush to dielectric stop. Solder in place as shown.</li> <li>3. Allow to cool. Remove excess solder.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>1. Install connector subassembly in locator tool.</li> <li>2. Locate on end of cable. Tighten locator tool gently to secure joint.</li> <li>3. Solder connector to cable. Do not overheat.</li> <li>4. Clean solder joint and remove excess flux.</li> </ol>			
<p><b>Procedure 4</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>1. Adherence to the above steps will yield tolerances shown.</li> </ol>			

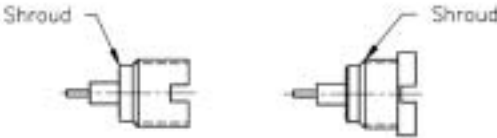
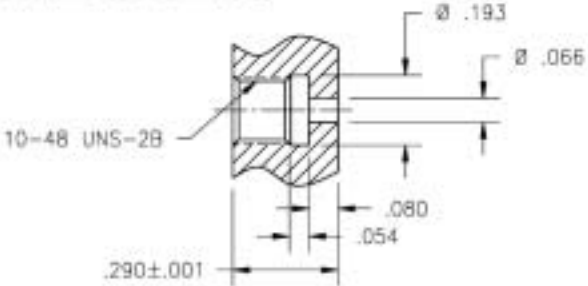
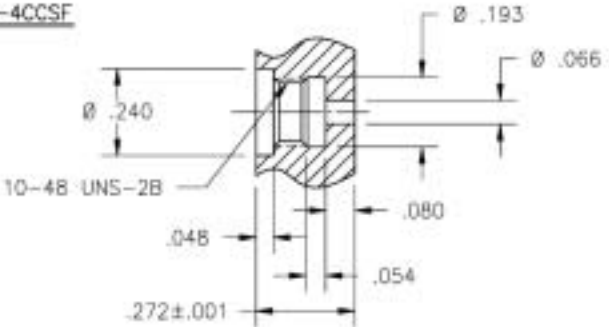
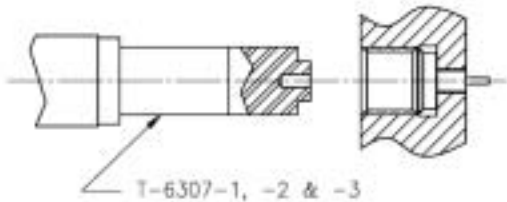
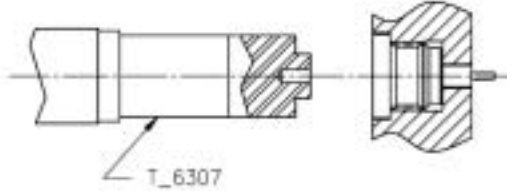
# Assembly Instructions AI-316

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMP Male Straight 2 Hole Flange Mount With Solder On Contact.</p> <p>Solder Attachment</p>	<p>Ø .047 Semi-Rigid And Low Loss Cable.</p>		<p>Fixture Base: T-6053 Center Contact Holder And Locator Tool: T-6308-1 (-1SF,-7SF) T-6308-2 (-2SF,-8SF) T-6308-3 (-3SF,-9SF,-13SF) Clamp Insert: T-6055-3</p>	<p>P664-1SF, -2SF, -3SF P664-7SF, -8SF, -9SF P664-13SF</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>Trim outer conductor and dielectric to dimension shown.</li> </ol>			
<p><b>Procedure 2</b></p>	<p><b>Attach Center Conductor to Cable</b></p> <ol style="list-style-type: none"> <li>Install dielectric stop over cable inner conductor in the orientation shown.</li> <li>Place center contact over center contact holder then slide over cable inner conductor until flush to dielectric stop. Solder in place as shown. Temperature should not exceed 550°F.</li> <li>Allow to cool. Remove excess solder.</li> </ol>			
<p><b>Procedure 3</b></p>	<p><b>Attach Cable to Connector</b></p> <ol style="list-style-type: none"> <li>Install connector subassembly in locator tool.</li> <li>Locate on end of cable. Tighten locator tool gently to secure joint.</li> <li>Solder connector to cable. Do not overheat. Temperature must not exceed 550° F.</li> <li>Clean solder joint and remove excess flux.</li> </ol>			
<p><b>Procedure 4</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>Adherence to the above steps will yield tolerances shown.</li> </ol>			

# Assembly Instructions AI-334

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N												
SMP Male Straight to Flex Cable	RG178 RG316 RD178 RD316		No Tool Required	<table border="0"> <tr> <td>P661-1CC</td> <td>P661-7CC</td> </tr> <tr> <td>P661-2CC</td> <td>P661-8CC</td> </tr> <tr> <td>P661-3CC</td> <td>P661-9CC</td> </tr> <tr> <td>P661-4CC</td> <td>P661-10CC</td> </tr> <tr> <td>P661-5CC</td> <td>P661-11CC</td> </tr> <tr> <td>P661-6CC</td> <td>P661-12CC</td> </tr> </table>	P661-1CC	P661-7CC	P661-2CC	P661-8CC	P661-3CC	P661-9CC	P661-4CC	P661-10CC	P661-5CC	P661-11CC	P661-6CC	P661-12CC
P661-1CC	P661-7CC															
P661-2CC	P661-8CC															
P661-3CC	P661-9CC															
P661-4CC	P661-10CC															
P661-5CC	P661-11CC															
P661-6CC	P661-12CC															
<p><b>Procedure</b></p> <p><b>1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Prepare cable end as shown.</li> <li>2. Dip stripped end into solder pot for 3–5 seconds and allow solder to wet braid. Solder pot temp to be at 500°F.</li> <li>3. Trim dielectric cable braid and expose center conductor as shown.</li> <li>4. Tin center conductor.</li> </ol>		<p>Step 1 &amp; 2</p>  <p>Flex Cable</p> <p>Step 3</p>  <p>Braid</p>													
<p><b>Procedure</b></p> <p><b>2</b></p>	<p><b>Attach Cable to Housing</b></p> <ol style="list-style-type: none"> <li>1. Place shrink tubing over cable.</li> <li>2. Install dielectric end stop over cable center conductor in the orientation shown.</li> <li>3. Place center contact over the center conductor of cable. Push flush to dielectric stop. Solder in place.</li> <li>4. Insert cable sub-assembly into connector housing. Solder in place.</li> <li>5. Slide heat shrink tubing to back end of connector housing. Shrink into place.</li> <li>6. Apply torque 30–40 Oz-in to locknut when mounting on panel.</li> </ol>		<p>Step 1</p>  <p>Shrink Tubing</p> <p>Center Conductor</p> <p>Step 2 &amp; 3</p>  <p>Solder</p> <p>Dielectric Stop</p> <p>Center Contact</p> <p>Step 4</p>  <p>Solder</p> <p>Connector Housing</p> <p>Step 5 &amp; 6</p>  <p>Lock washer</p> <p>Shrink Tubing</p> <p>Locknut</p> <p>Connector</p>													

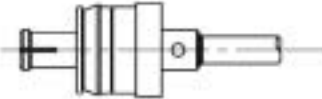
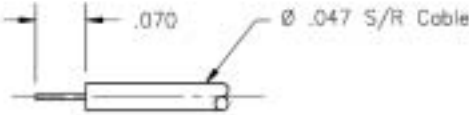
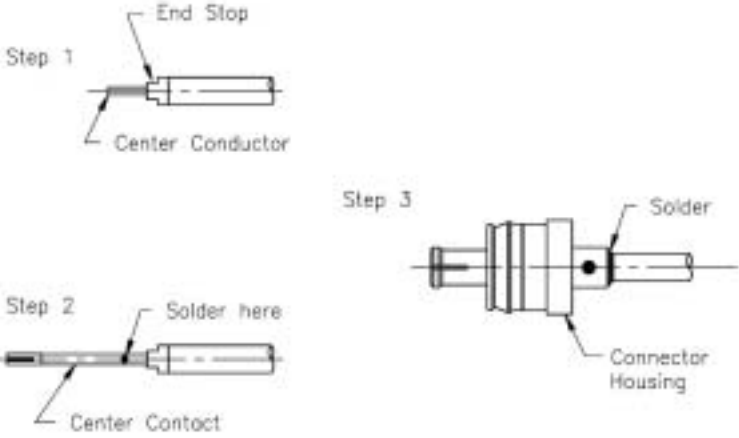
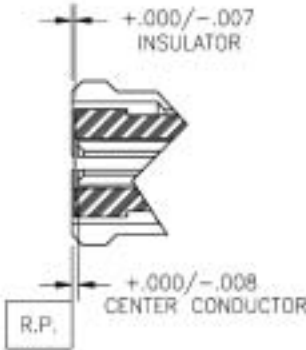
# Assembly Instructions AI-359

<b>Connector Type</b> SMP Male Captivated Contact Thread-in Attachment	<b>Cable Type</b>	<b>Connector Components</b> 	<b>Tools Required</b> Installation & Removal Tool:	<b>P/N</b> T-6307	<b>Connector P/N</b> P674-1CCSF P674-2CCSF P674-3CCSF P674-4CCSF
<b>Procedure</b>  <div style="font-size: 48pt; font-weight: bold; color: blue; text-align: center;">1</div>	<b>Mounting Hole Configuration</b>	<div style="display: flex; flex-direction: column;"> <div style="margin-bottom: 20px;"> <p><u>P674-1CCSF, -2CCSF &amp; -3CCSF</u></p>  </div> <div> <p><u>P674-4CCSF</u></p>  </div> </div>			
<b>Procedure</b>  <div style="font-size: 48pt; font-weight: bold; color: blue; text-align: center;">2</div>	<b>Shroud Installation</b> 1. Install shroud by threading into housing. 2. Use tool to torque to 8-10 inch pounds.	<div style="display: flex; flex-direction: column;"> <div style="margin-bottom: 20px;"> <p><u>P674-1CCSF, -2CCSF &amp; -3CCSF</u></p>  </div> <div> <p><u>P674-4CCSF</u></p>  </div> </div>			


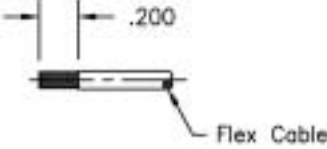
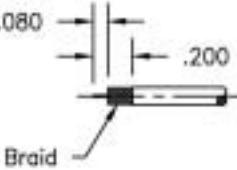
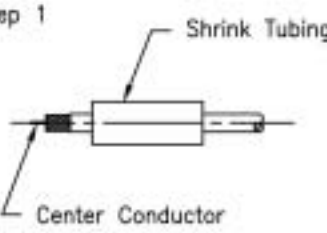
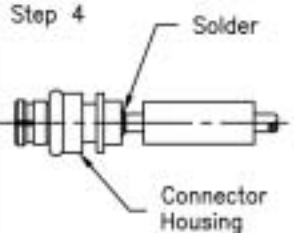
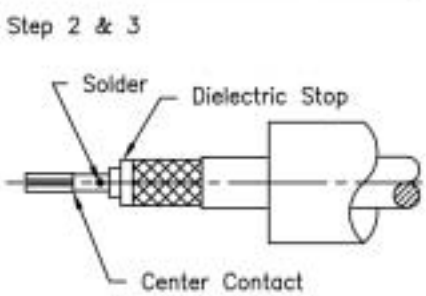
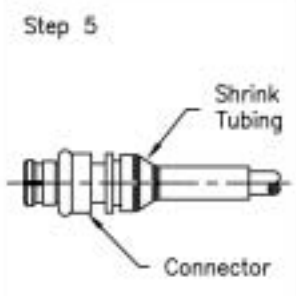
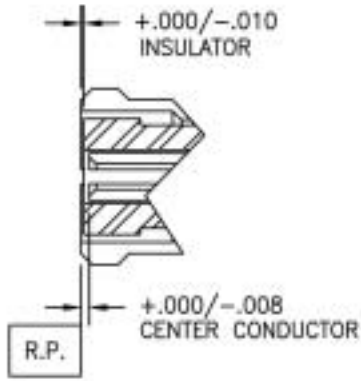
P/N	Tool No.
-1CCSF	T-6307-1
-2CCSF	T-6307-2
-3CCSF	T-6307-3
-4CCSF	T-6307



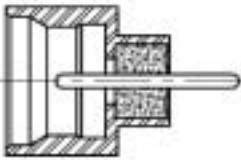
# Assembly Instructions AI-364

<b>Connector Type</b> SMP Female Float Mount to S/R Cable	<b>Cable Type</b> $\varnothing$ .047 S/R Micro-Porous	<b>Connector Components</b> 	<b>Tools Required</b> No special tools required.	<b>Connector P/N</b> P666-7CC P666-8CC
<b>Procedure 1</b>	<b>Preparation of Cable</b> 1. Prepare cable end as shown.			
<b>Procedure 2</b>	<b>Attach Cable to Housing</b> 1. Install dielectric end stop over cable center conductor in the orientation shown. 2. Place center contact over the center conductor of cable. Push flush to end stop. Solder in place. 3. Insert cable into connector housing. Solder in place.			
<b>Procedure 3</b>	<b>Inspection of Completed Connector Assembly</b> 1. Adherence to the above steps will yield tolerances shown.			

# Assembly Instructions AI-365

Connector Type	Cable Type	Connector Components	Tools Required	Connector P/N
<p>SMP Female Straight to Flex Cable</p>	<p>RG178 RG316 RD178 RD316</p>		<p>No Tool Required</p>	<p>P657-1CC P657-9CC P657-2CC P657-10CC P657-3CC P657-4CC P657-5CC P657-6CC P657-7CC</p>
<p><b>Procedure 1</b></p>	<p><b>Preparation of Cable</b></p> <ol style="list-style-type: none"> <li>1. Prepare cable end as shown.</li> <li>2. Dip stripped end into solder pot for 3-5 seconds and allow solder to wet braid. Solder pot temp to be at 500°F.</li> <li>3. Trim dielectric cable braid and expose center conductor as shown.</li> </ol>	<p>Step 1 &amp; 2</p>  <p>Flex Cable</p> <p>Step 3</p>  <p>Braid</p>	<p>Step 1</p>  <p>Shrink Tubing</p> <p>Center Conductor</p> <p>Step 4</p>  <p>Solder</p> <p>Connector Housing</p>	<p>Step 2 &amp; 3</p>  <p>Solder</p> <p>Dielectric Stop</p> <p>Center Contact</p> <p>Step 5</p>  <p>Shrink Tubing</p> <p>Connector</p>
<p><b>Procedure 3</b></p>	<p><b>Inspection of Completed Connector Assembly</b></p> <ol style="list-style-type: none"> <li>1. Adherence to the above steps will yield tolerances shown.</li> </ol>	 <p>+ .000 / - .010 INSULATOR</p> <p>+ .000 / - .008 CENTER CONDUCTOR</p> <p>R.P.</p>		

# Assembly Instructions AI-367

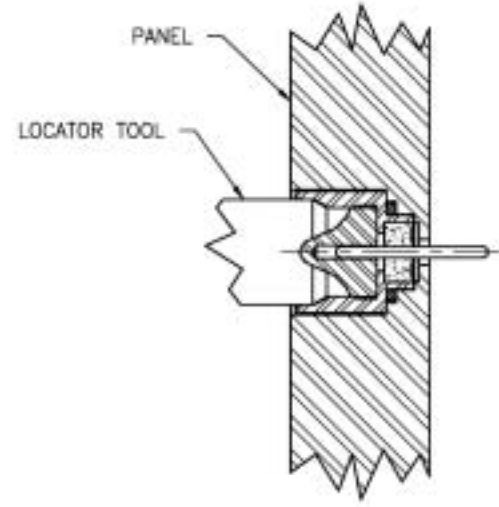
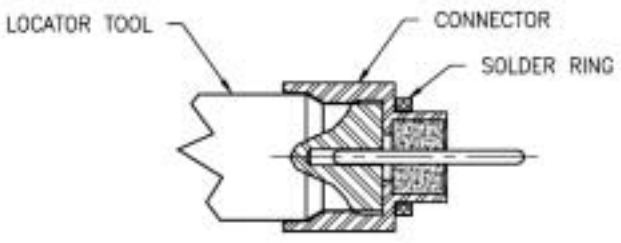
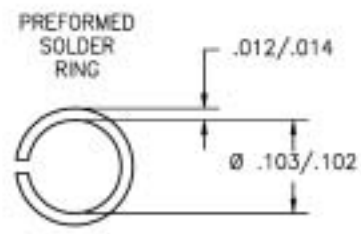
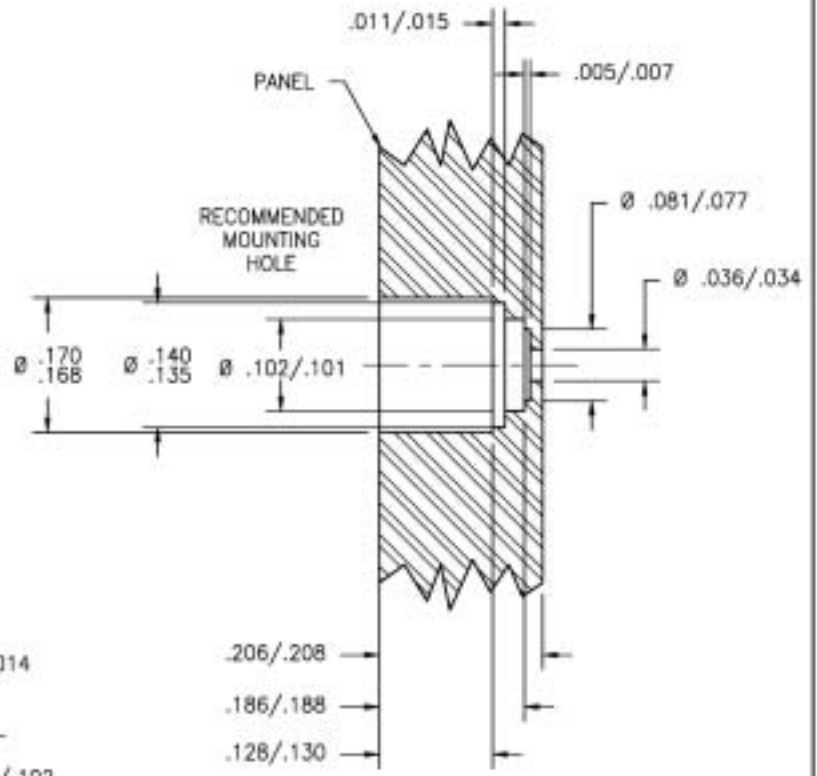
Connector Type	Cable Type	Connector Components	Tools Required	Collector P/N
SMP MALE HERMETIC			Locator Tool: T-6296-2	P794-1CC
Solder Attachment				

**1** MOUNT CONNECTOR ON LOCATOR TOOL AS SHOWN

**2** INSTALL SOLDER RING ON CONNECTOR AS SHOWN

**3** INSERT LOCATOR TOOL WITH CONNECTOR AND SOLDER RING INTO PANEL AS SHOWN.

**4** SOLDER INTO PLACE.



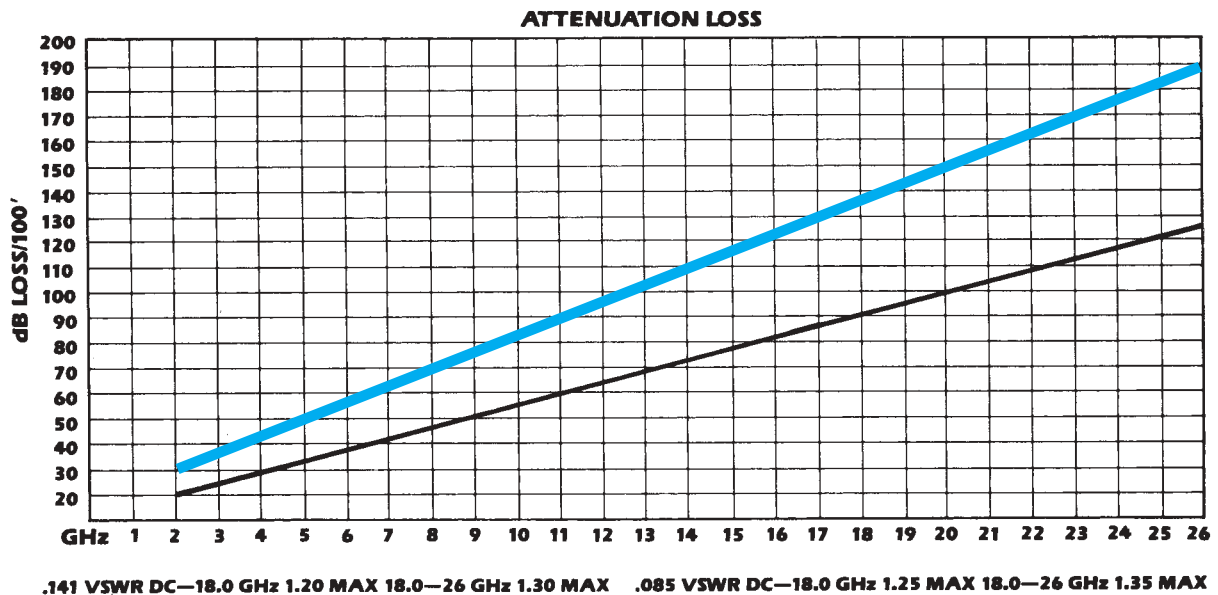
## Table of VSWR Conversions

VSWR to Return Loss			Return Loss to VSWR		
VSWR	Reflection Coefficient	Return Loss, dB	Return Loss, dB	Reflection Coefficient	VSWR
1.01	.0050	46.06	40	.0100	1.020
1.02	.0099	40.09	39	.0112	1.023
1.03	.0148	36.61	38	.0126	1.026
1.04	.0196	34.15	37	.0141	1.029
1.05	.0244	32.26	36	.0158	1.032
1.06	.0291	30.71	35	.0178	1.336
1.07	.0338	29.42	34	.0200	1.041
1.08	.0385	28.30	33	.0224	1.046
1.09	.0431	27.32	32	.0251	1.052
1.10	.0476	26.44	31	.0282	1.058
1.11	.0521	25.66	30	.0316	1.065
1.12	.0566	24.94	29	.0355	1.074
1.13	.0610	24.29	28	.0398	1.083
1.14	.0654	23.69	27	.0447	1.094
1.15	.0698	23.13	26	.0501	1.106
1.16	.0741	22.61	25	.0562	1.119
1.17	.0783	22.12	24	.0631	1.135
1.18	.0826	21.66	23	.0708	1.152
1.19	.0868	21.23	22	.0794	1.173
1.20	.0909	20.83	21	.0891	1.196
1.21	.0950	20.44	20	.1000	1.222
1.22	.0991	20.08	19	.1122	1.253
1.23	.1031	19.73	18	.1259	1.288
1.24	.1071	19.40	17	.1413	1.329
1.25	.1111	19.08	16	.1585	1.377
1.26	.1150	18.78	15	.1778	1.433
1.27	.1189	18.49	14	.1995	1.499
1.28	.1228	18.22	13	.2239	1.577
1.29	.1266	17.95	12	.2512	1.671
1.30	.1304	17.69	11	.2818	1.785

## RG Flexible Cable Dimensions

Cable	Center Conductor	O.D. Dielectric	O.D. Shield	O.D.	Impedance
RG-55B/U	.032	.116	(DB).176	.206	53.5
RG-58C/U	.038	.116	.150	.195	50
RG-59B/U	.023	.146	.191	.242	75
RG-62A/U	.025	.146	.191	.242	93
RG-71B/U	.025	.146	.208	.250	93
RG-140/U	.025	.146	.176	.233	75
RG-141A/U	.039	.116	.146	.190	50
RG-142B/U	.039	.116	(DB).171	.195	50
RG-174B/U	.019	.060	.080	.100	50
RG-178B/U	.012	.035	.054	.080	50
RG-179B/U	.012	.060	.084	.110	75
RG-180B/U	.012	.102	.124	.145	95
RG-187A/U	.012	.060	.084	.110	75
RG-188A/U	.020	.060	.081	.110	50
RG-195A/U	.012	.102	.124	.155	95
RG-196A/U	.012	.034	.054	.080	50
RG-223/U	.032	.116	(DB).176	.206	53.5
RG-303/U	.039	.116	.146	.190	50
RG-316/U	.020	.060	.081	.110	50

## Semi-Flex® Flexible Reformable Cable Attenuation and VSWR





## M39012/ Tensolite P/N

79-3007	.5285-M007-01
79-3008	.5285-M008-01
79-3011	.5285-M011-01
79-3012	.5285-M012-01
79-3107	.5285-M107-01
79-3108	.5285-M108-01
79-3111	.5285-M111-01
79-3112	.5285-M112-01
79B3001	.5285-M001-01
79B3002	.5285-M002-01
79B3003	.5285-M003-01
79B3004	.5285-M004-01
79B3101	.5285-M101-01
79B3102	.5285-M102-01
79B3103	.5285-M103-01
79B3104	.5285-M104-01
80-3005	.5850-M005-01
80-3006	.5850-M006-01
80-3007	.5850-M007-01
80-3008	.5850-M008-01
80-3011	.5850-M011-01
80-3012	.5850-M012-01
80-3105	.5850-M105-01
80-3106	.5850-M106-01
80-3107	.5850-M107-01
80-3108	.5850-M108-01
80-3111	.5850-M111-01
80-3112	.5850-M112-01
80B3001	.5850-M001-01
80B3002	.5850-M002-01
80B3003	.5850-M003-01
80B3004	.5850-M004-01
80B3101	.5850-M101-01
80B3102	.5850-M102-01
80B3103	.5850-M103-01
80B3104	.5850-M104-01
81-3005	.5286-M005-01
81-3006	.5286-M006-01
81-3007	.5286-M007-01
81-3008	.5286-M008-01
81-3011	.5286-M011-01
81-3012	.5286-M012-01
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81B3002	.5286-M002-01
81B3003	.5286-M003-01
81B3004	.5286-M004-01
82-3005	.5228-M005-01
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82-3013	.5229-M013-01
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82B3001	.5228-M001-01
82B3002	.5228-M002-01
82B3003	.5228-M003-01
82B3004	.5228-M004-01
83-3005	.5289-M005-01

## M39012/ Tensolite P/N

83-3006	.5289-M006-01
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83-3008	.5289-M008-01
83-3011	.5289-M011-01
83-3012	.5289-M012-01
83B3001	.5289-M001-01
83B3002	.5289-M002-01
83B3003	.5289-M003-01
83B3004	.5289-M004-01
92B3001	.5319-M001-01
92B3003	.5319-M003-01
92B3101	.5319-M101-01
92B3103	.5319-M103-01
84149SSG	.5285-135-1CCSF
84149SSG-1	.5285-135-3SF
84149SSGA	.5285-135-2CCSF
84149SSGA-1	.5285-135-4SF
85022SSG	.5229-135-1CC
85022SSG-1	.5229-135-3
85022SSGA	.5229-135-2CC
85022SSGA-1	.5229-135-4
85037SSG	.5850-135-1CCSF
85037SSG-1	.5850-135-3CCSF
85037SSGA	.5850-135-2CCSF
8503812FP-3	.5045-135-1CCSF
8503812FP-4	.5012-135-1CCSF
8503812FP-5	.5009-135-1CCSF
8503812FP-6	.5009-135-1CCSF
8503812FP-7	.5009-135-1CCSF
8604412SP-1	.5006-135-1CCSF
8604412SP-2	.5010-135-1CCSF
8604412SP-3	.5008-135-1CCSF
8604412SP-4	.5004-135-1CCSF
88046SSG	.5286-135-1CC
88046SSG-1	.5286-135-3
88046SSGA	.5286-135-2CC
88046SSGA-1	.5286-135-4
88047SSG	.5289-135-1CC
88047SSG-1	.5289-135-3
88047SSGA	.5289-135-2CC
88047SSGA-1	.5289-135-4
885037SSGA-1	.5850-135-4CCSF
94007ZCG-1	.P650-135-1CC
94007ZCG-2	.P650-135-2CC
94007ZSP-3	.P670-135-1SF
94007ZSP-3L	.P672-135-1SF
94007ZSP-3S	.P673-135-1SF
94007ZSP-4	.P670-135-2SF
94007ZSP-4L	.P672-135-2SF
94007ZSP-4S	.P673-135-2SF
94007ZSP-5	.P670-135-3SF
94007ZSP-5L	.P672-135-3SF
94007ZSP-5S	.P673-135-3SF
9400ZSP-6SC	.P671-135-1SF
94008ZCG-1	.P651-135-1CC
94008ZCG-2	.P651-135-2CC
94008ZCG-3	.P652-135-1CC
94008ZCG-4	.P652-135-2CC





# Tensolite

A **CARLISLE** Company

( 8 6 6 ) 2 8 2 - 4 7 0 8

( 5 6 2 ) 4 9 4 - 0 9 5 5 ( f a x )

T e n s o l i t e . c o m