

## MID PERFORMANCE INTERCONNECT CABLE ASSEMBLY

**SWI-110 Group** 

Frequency Range: DC-18 GHz

The **SWI 110** Interconnect Assembly series incorporates low loss performance cable and precision connectors providing for a good interconnect cable. These cables are ideal for in-box or in-cabinet applications to 18 GHz. These assemblies feature low loss double shielded cable with a FEP Teflon® jacket. The double shielded construction of these cables gives outstanding shielding effectiveness of greater than -85dB @ 18 GHz. The assemblies feature precision connectors designed to meet MIL-C-39012,MIL-STD-348a or all applicable industry specs, and are available in straight male, bulkhead, female, and right angle male styles. These cable assemblies feature low loss, excellent VSWR, and are excellent to increase the performance of any system.

### **FEATURES**

Precision connectors

FEP outer jacket

Double shielded for -85 dB leakage at 18 GHz

Low loss PTFE tape dielectric

## **CONNECTORS**

SMA, MCX

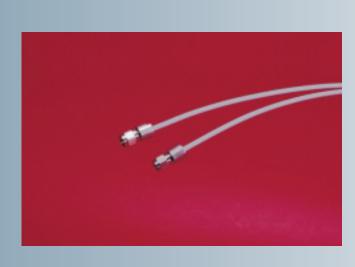
Straight male, right angle male; bulkhead female

## **CABLE SIZE**

.115 inches, nominal outer diameter; 6 inches, 12 inches, 18 inches, 24 inches, 30 inches, 36 inches standard length

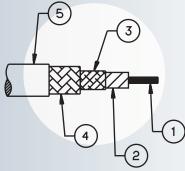
## **APPLICATIONS**

General purpose, low loss interconnections High temperature (+200°C) environments (-65°C) low temperature



Teflon is a registered trademark of the DuPont Corporation

# **Cable Construction**



- 1. Center conductor: Silver plated copper \*
- 2. Dielectric: Microporous PTFE tape
- 3. Outer conductor: Silver plated copper flat braid\*
- 4. Braid: Silver plated copper round braid \*
- 5. Jacket options: Extruded FEP
  - \* Silver plating per ASTM-B-298

20

17.5

FEMALE

BULKHD

24

15

### MID PERFORMANCE INTERCONNECT CABLE ASSEMBLY

60

0

O

2.5

CONNECTOR

STYLE

SMA

MCX

5

7.5

10

Frequency (GHz)

**CONNECTOR CODES** 

MALE

12.5

RA

22

82

Attenuation (db/100ft)

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SW110 CABLE ATTENUATION vs FREQUENCY

#### **ELECTRICALS**

Velocity of Propagation %		76
RF Leakage Min. @ 18 GHz dB/ft		-85
Impedance	Nominal	50
Capacitance	pF/ft (pF/m)	27 (88.58)
Delay	ns/ft (ns/m)	1.34 (4.40)
Breakdown Voltage	KV	>5

### **MECHANICAL/ENVIRONMENTAL**

Nominal Diameter	inches (cm)	.115 (.300)
Minimum Bend Radius	inches (cm)	.5 (1.27)
Temperature	DEG. C	-65/+200
Weight	lb/ft (kg/m)	.02 (.03)

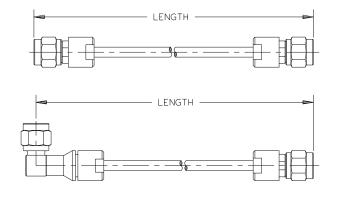
### **MATERIALS AND FINISHES CONNECTORS**

SMA Body	Stainless steel
SMA Nut	Stainless steel
Gasket	Silicon Rubber
Contact	BeCu / Gold plated
Insulator	PTFE

#### **MATERIALS AND FINISHES CABLE**

Cable Jacket	FEP	
Outer Shield	Silver Copper	
Inter Conductor	Silver Copper	
Dielectric	Micro-porous PTFE	
Center Conductor	Silver Copper	

#### HOW TO MEASURE LENGTH

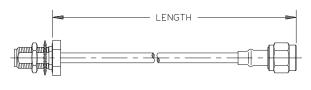


Standard Lengths of 6 inches, 12 inches, 18 inches, 24 inches, 30 inches, 36 inches

STR

21

81



HOW TO SPECIFY PART NUMBER

CONNECTOR ONE CONNECTOR TWO SW110

STANDARD LENGTH (INCHES)

FOR EXAMPLE:

SMA STRAIGHT MALE TO SMA STRAIGHT MALE, 36 INCHES LONG. NOTE: USE LEADING ZEROS WHEN SPECIFYING LENGTH.

PART NUMBER IS:

21

21

SW110

036

FOR OTHER CONFIGURATION AND LENGTHS CONTACT SEMFLEX: customer.service@semflex.com







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# **SWI-110 GROUP CONNECTORS**

