

# 1674A Coax - 50 Ohm Microwave Cable





For more information please call
1-800-Belden1

**See Put-ups and Colors** 

## **Description:**

 $M17/151\ type,\ 29\ AWG\ solid\ .011"\ silver-plated\ copper-covered\ steel\ conductor,\ TFE\ Teflon\@insulation,\ copper-tin\ composite\ shield\ (100\%\ coverage),\ unjacketed.$ 

#### PHYSICAL CHARACTERISTICS:

#### **CONDUCTOR:**

Number of Coax	1
Total Number of Conductors	1
RG Type	M17/151
AWG	29
Stranding	Solid
Conductor Diameter	.011 in.
Conductor Material	SPCCS - Silver Plated Copper Covered Steel

## **INSULATION:**

Insulation Material Trade Name	Teflon®
Insulation Material	TFE - Tetrafluoroethylene
Insulation Diameter	.034 in.

#### **OUTER SHIELD:**

Outer Shield Type Tape/Braid

Outer Shield Material:

Layer Number Trade Name		Type Material		% Coverage (%)	
1		Tape	Copper Foil	100	
2		Braid	Tin-Filled Composite	100	

Outer Shield %Coverage 100 %

#### **OUTER JACKET:**

Outer Jacket Material Unjacketed

## **OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter .047 in.

## **MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-70°C To +200°C
UL Temperature Rating	105°C (UL AWM Style 10245)



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Non-UL Temperature Rating	200°C
Bulk Cable Weight	3.75 lbs/1000 ft.
Max. Recommended Pulling Tension	20 lbs.
Min. Bend Radius (Install)	0.12 in.
Min. Bend Radius (Continuous Flexing)	0.37 in.

## APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

## **APPLICABLE STANDARDS:**

AWM Specification	UL Style 10245 (30 V 105°C)
EU CE Mark (Y/N)	No
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005

## FLAME TEST:

Other Flame Test Horizontal Wire

## **SUITABILITY:**

Suitability - Indoor
Yes
Suitability - Outdoor
Yes
Suggested Connectors
Connectors: CDI #5285-5CC and QMI #3-3697-814-10

# PLENUM/NON-PLENUM:

Plenum (Y/N)

## **ELECTRICAL CHARACTERISTICS:**

Nom. Characteristic Impedance	50 Ohms
Nom. Inductance	.07 μH/ft
Nom. Capacitance Conductor to Shield	29.5 pF/ft
Nominal Velocity of Propagation	69.5 %
Nominal Delay	1.46 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	205.0 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg.C	8 Ohms/1000 ft
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## Maximum VSWR:

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum VSWR
	500			1.16:1
	1000			1.17:1
	3000			1.20:1
	5000			1.24:1
	10000			1.33:1
	15000			1.41:1
	18000			1.50:1
	20000			1.50:1

Nom. Attenuation:



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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	500			25.0
	1000			36.7
	2000			53.8
	3000			67.3
	5000			89.2
	7000			107.5
	10000			130.9
	15000			163.8
	18000			181.1
	20000			192.0

Max. Power Rating:

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Power Rating (W)
	500			45
	1000			31
	2000			22
	3000			18
	5000			13
	7000			11
	10000			9.3
	15000			7.6
	18000			6.9
	20000			6.5

Max. Operating Voltage - UL 30 V RMS (UL AWM Style 10245)

Max. Operating Voltage - Non-UL 1000 V RMS

#### **NOTES:**

Notes

US Patents 4, 694, 122 & 5, 293, 001. Patent held in the U.S., Singapore, Australia, Germany, France, and England. Patent pending in Japan. Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

## **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1674A TIN100	#29 TFE BRD TINNED COAX	100	0.2	TIN - COLOR	
1674A TIN1000	#29 TFE BRD TINNED COAX	1000	4	TIN - COLOR	
1674A TIN50	#29 TFE BRD TINNED COAX	50	0.1	TIN - COLOR	
1674A TIN500	#29 TFE BRD TINNED COAX	500	2	TIN - COLOR	

Revision Number: 2 Revision Date: 07-12-2005

# Detailed Specifications & Technical Data



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