



Product: [1674A](#)

Conformable® Coax, 50 Ohm Microwave, #29, SPCCS, Unjacketed



Product Description

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

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
29	Solid	SPCCS - Silvered Copper Covered Steel	0.011 in	1

Conductor Count: 1

Insulation

Material	Material Trade Name	Nominal Diameter
PTFE - Polytetrafluoroethylene	Teflon®	0.034 in

Outer Shield

Type	Layer	Material	Coverage [%]
Tape	1	Bare Copper (BC)	100%
Braid	2	Tinned Copper (TC + Tin Filled)	100%

Outer Jacket

Material
No Jacket

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
205 Ohm/1000ft	205 Ohm/1000ft	8 Ohm/1000ft	8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
29.5 pF/ft

Inductance

Nominal Inductance
0.07 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
500 MHz	25 dB/100ft

1000 MHz	36.7 dB/100ft
2000 MHz	53.8 dB/100ft
3000 MHz	67.3 dB/100ft
5000 MHz	89.2 dB/100ft
7000 MHz	107.5 dB/100ft
10000 MHz	130.9 dB/100ft
15000 MHz	163.8 dB/100ft
18000 MHz	181.1 dB/100ft
20000 MHz	192 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.46 ns/ft	70%

Power Rating

Frequency [MHz]	Max. Power Rating [W]
500 MHz	45 W
1,000 MHz	31 W
2,000 MHz	22 W
3,000 MHz	18 W
5,000 MHz	13 W
7,000 MHz	11 W
10,000 MHz	9.3 W
15,000 MHz	7.6 W
18,000 MHz	6.9 W
20,000 MHz	6.5 W

Voltage

Non-UL Voltage Rating	UL Voltage Rating
1000 V RMS	30 V RMS

VSWR

Frequency [MHz]	Max. VSWR
500 MHz	1.16:1
1000 MHz	1.17:1
5000 MHz	1.24:1
10000 MHz	1.33:1
15000 MHz	1.41:1
20000 MHz	1.50:1
18000 MHz	1.50:1
20000 MHz	1.50:1

Temperature Range

Non-UL Temp Rating:	200°C
UL Temp Rating:	105°C
Operating Temperature Range:	-70°C To +200°C

Mechanical Characteristics

Bulk Cable Weight:	3 lbs/1000ft
Max. Pull Tension:	20 lbs
Min Bend Radius (Overall):	0.5 in
Min. Bend Radius During Installation:	0.125 in
Min Flexing Radius:	0.375 in

Standards

UL AWM Style Compliance:	AWM 10245 (30 V 105°C)
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Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes

EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	Horizontal Wire
UL voltage rating:	30 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
1674A TIN50	Tin	Reel	50 ft	612825120506
1674A TIN100	Tin	Reel	100 ft	612825120483
1674A TIN500	Tin	Reel	500 ft	612825120513
1674A TIN1000	Tin	Reel	1,000 ft	612825120490

Product Notes

Notes:	VSWR limit is a continuous line from 500 MHz to 20 GHz
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History

Update and Revision:	Revision Number: 0.434 Revision Date: 11-09-2022
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