



Product: <u>1674A</u> ☑

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 SCCS - Silvered Copper Covered Steel 0.011 in 1 Conductor Count: 1

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

Outer Shield

Ту	/pe	Layer	Material	Coverage [%]
Та	аре	1	Bare Copper (BC)	100%
Br	aid	2	Tinned Copper (TC + Tin Filled)	100%

Outer 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 Temperature Rating:	105°C
Operating Temperature Range:	-70°C To +200°C

Mechanical Characteristics

Bulk Cable Weight:	3 lbs/1000ft
Maximum Recommended Pulling Tension:	20 lbs
Min Bend Radius (Overall):	0.5 in
Minimum Bend Radius During Installation:	0.125 in
Min Flexing Radius:	0.375 in

Standards

UL AWM Style Compliance:	AWM 10245 (30 V 105°C)

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	

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

History

Update and Revision:	Revision Number: 0.436 Revision Date: 02-03-2025	

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.