

Product: [1671J](#) 

50 Ohm Microwave, RG405, #24 SPC Coax, PVC Jacket



Product Description

RG-405/U type, 24 AWG solid .020" silver-plated copper-covered steel conductor, TFE Teflon® insulation, copper-tin composite shield (100% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
24	Solid	SCCS - Silvered Copper Covered Steel	0.02 in	1

Conductor Count: 1

Insulation

Material	Material Trade Name	Nominal Diameter
PTFE - Polytetrafluoroethylene	Teflon®	0.062 in

Outer Shield

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

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.127 in

Electrical Characteristics

Conductor DCR				
Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
64.2 Ohm/1000ft	64.2 Ohm/1000ft		10.2 Ohm/1000ft	10.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
29.5 pF/ft

Inductance

Nominal Inductance
0.07 μ H/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
500 MHz	15 dB/100ft

1000 MHz	22.2 dB/100ft
2000 MHz	32.8 dB/100ft
3000 MHz	41.2 dB/100ft
5000 MHz	54.9 dB/100ft
7000 MHz	66.4 dB/100ft
10000 MHz	81.2 dB/100ft
15000 MHz	102 dB/100ft
18000 MHz	113 dB/100ft
20000 MHz	120 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	180 W
1,000 MHz	119 W
2,000 MHz	79 W
3,000 MHz	62 W
5,000 MHz	46 W
7,000 MHz	37 W
10,000 MHz	30 W
15,000 MHz	24 W
18,000 MHz	21 W
20,000 MHz	20 W

Voltage

Non-UL Voltage Rating	UL Voltage Rating
1500 V RMS	30 V RMS

VSWR

Frequency [MHz]	Max. VSWR
500 MHz	1.1:1
20000 MHz	1.3:1

Temperature Range

Non-UL Temp Rating:	105°C
UL Temp Rating:	105°C
Operating Temp Range:	-40°C To +105°C

Mechanical Characteristics

Bulk Cable Weight:	16 lbs/1000ft
Max. Pull Tension:	26 lbs
Min Bend Radius (Overall):	1 in
Min. Bend Radius During Installation:	0.125 in
Min Flexing Radius:	0.375 in

Standards

UL AWM Style Compliance:	UL Style 10245 (30 V 105°C)
RG Type:	405

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
MIl 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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Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
1671J 010100	Black	Reel	100 ft	612825120315
1671J 010500	Black	Reel	500 ft	612825120339
1671J 0101000	Black	Reel	1,000 ft	612825120322

Footnote:	V - 250' PUT-UP EXACT LENGTH MAXIMUM OF 3 PIECES, MINIMUM LENGTH 50'. 500' PUT-UP EXACT LENGTH MAXIMUM OF 5 PIECES, MINIMUM LENGTH 50'. 1000' PUT-UP EXACT LENGTH MAXIMUM OF 8 PIECES, MINIMUM LENGTH 50'.
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Product Notes

Notes:	Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.
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History

Update and Revision:	Revision Number: 0.382 Revision Date: 09-10-2021
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