


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 Material

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

Outer Jacket Material

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 µH/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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Flammability, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

Part Number

Variants

Item #	Color	Putup 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'.

Product Notes

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

History

Update and Revision:	Revision Number: 0.334 Revision Date: 02-16-2021
----------------------	--

© 2021 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.