Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

1673B Coax - 50 Ohm Microwave Cable

For more Information
please call

1-800-Belden1

Description:

RG-402/U type, 19 AWG solid .036" silver-plated copper conductor, TFE Teflon® insulation, copper-tin composite shield (100% coverage), unjacketed.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	19	Solid	SPC - Silver Plated Copper	.036

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	TFE - Tetrafluoroethylene	.116

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
1	Tape	Copper Foil	100
2	Braid	Tin-Filled Composite	100

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

Overall Cable

Overall Nominal Diameter:	0.138 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
UL Temperature Rating:	105°C
Non-UL Temperature Rating:	200°C
Bulk Cable Weight:	20 lbs/1000 ft.
Max. Recommended Pulling Tension:	70 lbs.
Min. Bend Radius (Install)/Minor Axis:	0.250 in.
Min. Bend Radius (Continuous Flexing):	0.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

AWM Specification:	UL Style 10245
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005

EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	402/U

Flame Test

Other Flame Test:	Horizontal Wire

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/ft)
0.070

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
29.5

Nominal Velocity of Propagation:

VP (%)
69.5

Nominal Delay:

Delay (ns/ft)
1.46

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
7.9

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.5

Maximum VSWR:

Description	Freq. (MHz)	Max. VSWR
Ramp Function, End Points	500	1.1
	20000	1.3

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
500	8.0
1000	12.0
2000	18.1
3000	22.9
5000	31.0
7000	37.8
10000	46.6
15000	59.1
18000	65.8
20000	70.0

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
500	9.5
1000	14.5
3000	26.5
5000	36.0
10000	54.0
20000	84.0

Nom. Power Rating:

Freq. (MHz)	Rating (W)
500	600
1000	401
2000	268
3000	211
5000	157
7000	129
10000	105
15000	83
18000	74
20000	70

Max. Operating Voltage - UL:

Voltage
30 V RMS

Max. Operating Voltage - Non-UL:

Voltage
1900 V RMS

Misc. Information (Overall)

Notes (Overall)

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.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1673B TIN100	100 FT	3.100 LB	TIN - COLOR	E	#19 TFE CU FS BRD TINNED COAX
1673B TIN250	250 FT	8.000 LB	TIN - COLOR	E	#19 TFE CU FS BRD TINNED COAX
1673B TIN500	500 FT	14.000 LB	TIN - COLOR	E	#19 TFE CU FS BRD TINNED COAX

Notes:
E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

Revision Number: 2 Revision Date: 09-30-2009

© 2012 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.
Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.