Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



83242 Coax - 50 Ohm Coax

For more Information please call

1-800-Belden1



Description:

19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE Teflon® insulation, double silver-coated copper braid shield (96% coverage), FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	19	Solid	SCCCS - Silver-coated Copper-covered Steel	0.940

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	TFE - Tetrafluoroethylene	2.9464

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
		Silver-coated Copper	
1	Braid	Silver-coated Copper	94

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 4.953 mm

Mechanical Characteristics (Overall)					
Operating Temperature Range:	-70°C To +200°C				
UL Temperature Rating:	200°C				
Bulk Cable Weight:	63.993 Kg/Km				
Max. Recommended Pulling Tension:	649.437 N				
Min. Bend Radius (Install)/Minor Axis:	50.800 mm				

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes

Page 1 of 3 05-10-2011

Detailed Specifications & Technical Data





83242 Coax - 50 Ohm Coax

EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Military Specification:	MIL-C-17G, M17/158-00001
RG Type:	142B/U
Flame Test	
UL Flame Test:	VW-1, NFPA 262
C(UL) Flame Test:	FT6
Other Information (Trademarks):	Teflon® is a DuPont trademark
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (μH/m) 0.219827

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 95.149

Nominal Velocity of Propagation:

VP (%) 70%

Nominal Delay:

Delay (ns/m) 4.85588

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 63.3233

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 7.5463

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
10	3.6091
50	8.5306
100	12.4678
200	17.7174
400	25.9199
700	35.1067
900	40.3563
1000	42.9811
2000	63.3233
3000	79.4002
5000	106.961
8000	141.739

Max. Operating Voltage - UL:

Voltage 150 V RMS

Max. Operating Voltage - Other:

Page 2 of 3 05-10-2011

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



83242 Coax - 50 Ohm Coax

Voltage	Description
1400 V RMS	Military

Misc. Information (Overall)

Notes (Overall)

Notes: Non-SWR swept version of RG-142. 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
83242 001100	30 MT	2.359 KG	BROWN	CE	M17/158-00001 COAX
83242 0011000	305 MT	19.958 KG	BROWN	CE	M17/158-00001 COAX
83242 001500	152 MT	9.979 KG	BROWN	CE	M17/158-00001 COAX

Notes:

C = CRATE REEL PUT-UP.

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

Revision Number: 3 Revision Date: 03-07-2008

© 2011 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.

Page 3 of 3 05-10-2011