Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



83242 Coax - 50 Ohm Coax

For more Information please call

1-800-Belden1



General Description:

19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE Teflon® insulation, double silver-coated copper braid shield (95% coverage), FEP jacket.

1

Physical Characteristics (Overall)

Conductor

AWG:

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

Total Number of Conductors:

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 (%)
1	Braid	Silver-coated Copper	95.000
1	Braid	Silver-coated Copper	95.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material FEP - Fluorinated Ethylene Propylene

Overall Cable

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/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 Directive 2011/65/EU (ROHS II):	Yes
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
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Military Specification:	MIL-DTL-17, M17/158-00001
RG Type:	142B/U

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Fla	me Test	
	UL Flame Test:	NFPA 262
	CSA Flame Test:	FT6
Su	itability	
	Suitability - Indoor:	Yes
Ple	num/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:

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.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83242 001100	100 FT	5.200 LB	BROWN	CE	M17/158-00001 COAX
83242 0011000	1,000 FT	44.000 LB	BROWN	CE	M17/158-00001 COAX
83242 001500	500 FT	22.000 LB	BROWN	CE	M17/158-00001 COAX

Notes:

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C = CRATE REEL PUT-UP.

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

Revision Number: 5 Revision Date: 04-04-2014

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