# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



# 84142 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 shields (95% coverage), FEP jacket.

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# **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
2	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:	62.504 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, M17/60
RG Type:	142/U

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Flame Test		
CSA Flame Test:	FT6	
Plenum/Non-Plenum		
Plenum (Y/N):	Yes	
Floctrical Characteristics (Overall)		

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



Nominal Outer Shield DC Resistance:

DCR @ 20°C (	Ohm/km)
7.5463	

Maximum VSWR:

Freq. (MHz)	Max. VSWR
50	1.11
400	1.14
1000	1.17
3000	1.33
8000	1.33

### Nom. Attenuation:

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	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. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
50	13.124
100	18.0455
400	38.3877
1000	62.339
3000	114.835
8000	216.546

#### Max. Power Rating:

Freq. (MHz)	Rating (W)
50	3500
100	2400
400	1100
1000	650
3000	330

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#### METRIC MEASUREMENT VERSION



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8000 180 Max. Operating Voltage - UL: 150 V RMS

#### Misc. Information (Overall)

#### Notes (Overall)

Notes: 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
84142 001100	100 FT	5.000 LB	BROWN		M17/60-RG142 COAX
84142 0011000	1,000 FT	44.000 LB	BROWN	CE	M17/60-RG142 COAX
84142 001500	500 FT	22.500 LB	BROWN	CE	M17/60-RG142 COAX

#### Notes:

C = CRATE REEL PUT-UP.

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

Revision Number: 6 Revision Date: 04-04-2014

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