

Product: <u>83242</u> ☑



50 Ohm Coax, RG142, 19 AWG Solid SCCCS, Double SCCCS Braids, FEP

Jacket, CMP

Product Description

RG-142B/U, 19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE insulation, double silver-coated copper braid shield (95% coverage), FEP jacket, commercial non-QPL product.

Technical Specifications

Product Overview									
Environmental Space: Ou				Outdoor - Aeria	I				
Phys	Physical Characteristics (Overall)								
Conductor									
AWG	Strand	ing	Mate	erial		Nominal Diameter	No. of Coax		
19	Solid	SCCC	S - Silver Coated	Copper Covered	d Steel	0.037 in	1		
Conductor Count: 1									
Insulation									
	Material Material Trade Name Nominal Diameter								
TFE - Tetrafluoroethylene Teflon®			0.116 in						
Outer Shield Material									
Type Layer Material		Coverage [%]							
Braid	1	SPC - Silve	r Plated Copper	95 %					
Braid	1	SPC - Silve	r Plated Conner	95 %					

Type	Layer	Material	Coverage [%]
Braid	1	SPC - Silver Plated Copper	95 %
Braid	1	SPC - Silver Plated Copper	95 %

Outer Jacket Material

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	0.195 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
19.3 Ohm/1000ft	2.3 Ohm/1000ft	2.3 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield 29 pF/ft

Inductance

Nominal Inductance 0.067 µH/ft

Impedance

Nominal Characteristic Impedance 50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
10 MHz	1.1 dB/100ft
50 MHz	2.6 dB/100ft
100 MHz	3.8 dB/100ft
200 MHz	5.4 dB/100ft
400 MHz	7.9 dB/100ft
700 MHz	10.7 dB/100ft
900 MHz	12.3 dB/100ft
1000 MHz	13.1 dB/100ft
2000 MHz	19.3 dB/100ft
3000 MHz	24.2 dB/100ft
5000 MHz	32.6 dB/100ft
8000 MHz	43.2 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.45 ns/ft	70 %

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
Military	150 V RMS	1400 V RMS (Mil Spec)

Temperature Range

UL Temp Rating:	200°C
Operating Temp Range:	-70°C To +200°C

Mechanical Characteristics

UV Resistance:	Yes - Black only
Bulk Cable Weight:	43 lbs/1000ft
Max Recommended Pulling Tension:	146 lbs
Min Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
RG Type:	142B/U Type
Military Specification:	Commercial, non-QPL product (M17/158-00001)
QPL (Qualified Parts List):	No

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/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:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LS0H, Toxicity Testing

UL Flammability: NFPA 262	UL Flammability:	NFFA 202		
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CSA Flammability:	FT6
UL voltage rating:	150 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
/	

Part Number

Variants

Item #	Color	UPC	Length	Footnote
83242 001100	Brown	612825203612	100 ft	CE
83242 0011000	Brown	612825203629	1,000 ft	CE
83242 001500	Brown	612825203650	500 ft	CE

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	E - MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'.

Product Notes

Notes:	Non-SWR swept version of RG-142

History

Update and Revision:	Revision Number: 0.280 Revision Date: 08-22-2019

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