

**Product:** [83242](#) 



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

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
19	Solid	SCCS - Silvered Copper Covered Steel	0.037 in	1

Conductor Count:	1
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#### Insulation

Material	Material Trade Name	Nominal Diameter
PTFE - Polytetrafluoroethylene	Teflon®	0.116 in

#### Outer Shield Material

Type	Layer	Material	Coverage [%]
Braid	1	SC - Silvered Copper	95%
Braid	1	SC - Silvered 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. Pull Tension:	146 lbs
Min Bend Radius/Minor Axis:	2 in

#### Standards

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

#### Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Aerial
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
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, LSOH, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6

UL voltage rating:	150 V RMS
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### Plenum/Non-Plenum

Plenum (Y/N):	Yes
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### Part Number

#### Variants

Item #	Color	Putup Type	Length	UPC
83242 001100	Brown	Reel	100 ft	612825203612
83242 001500	Brown	Reel	500 ft	612825203650
83242 0011000	Brown	Reel	1,000 ft	612825203629

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
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### History

Update and Revision:	Revision Number: 0.287 Revision Date: 04-28-2020
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