Belden



Product: 83242

Mil-Spec Coax, 50 Ohm, RG-142, 19 AWG Solid SCCS, Double 95% SC Braid, FEP Jkt, CMP, Commercial Non-QPL

Product Description

Mil-Spec Coax, 50 Ohm, RG-142, 19 AWG Solid Silvered Copper Covered Steel Conductor, PTFE Insulation, Double 95% Silvered Copper Braid Shield, FEP Jacket, CMP, Commercial, non-QPL

Technical Specifications

Product Overview

Suitable Applications:	Aerospace wireless communication

Construction Details

RG Type:	142

Conductor

Size	Stranding	Nom. Diameter	Material
19 AWG	Solid	0.037 in	SCCS - Silvered Copper Covered Steel

Insulation

Material	Nom. Insulation Diameter	Color Code
PTFE - Polytetrafluoroethylene	0.116 in (2.95 mm)	White

Outer Shield

Layer	Outer Shield Type	Material	Coverage
1	Braid	Silvered Copper (SC)	95%
2	Braid	Silvered Copper (SC)	95%

Outer Jacket

Material	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.195 in (4.95 mm)

Overall Cable Diameter (Nominal):	0.195 in (4.95 mm)

Electrical Characteristics

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.3 dB/100ft
10 MHz	1.1 dB/100ft
50 MHz	2.6 dB/100ft
100 MHz	3.8 dB/100ft
200 MHz	5.6 dB/100ft
400 MHz	6.9 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

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
19.0 Ohm/1000ft	2.3 Ohm/1000ft (7.5 Ohm/km)	29 pF/ft (95 pF/m)	50 Ohm	70%

Voltage

UL Voltage Rating	Voltage Rating
300 V (CMP)	1400 V (Mil-Spec)

Mechanical Characteristics

Temperature

UL Temperature	Operating
200°C	-70°C to +200°C

Bend Radius

Installation Min.
2 in (51 mm)

Max. Pull Tension:	103 lbs (46.7 kg)
Bulk Cable Weight:	42 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor, Outdoor, UV Resistance, Aerial - When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262
NEC / UL Compliance:	CMP
CEC / C(UL) Compliance:	CMP
Military Compliance:	Commercial, non-QPL product (M17/158-00001)
European Directive Compliance:	REACH

History

Update and Revision:	Revision Number: 0.514 Revision Date: 09-07-2025

Part Numbers

Variants

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

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

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