



Product: [83265](#)

Mil-Spec Coax, 50 Ohm, RG-178, 30 AWG Str SCCS, 95% SC Braid, FEP Jkt, Commercial Non-QPL

Product Description

Mil-Spec Coax, 50 Ohm, RG-178, 30 AWG (7x38) Silvered Copper Covered Steel Conductor, PTFE Insulation, 95% Silvered Copper Braid Shield, FEP Jacket, Commercial, non-QPL

Technical Specifications

Product Overview

Suitable Applications:	Aerospace wireless communication
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Construction Details

RG Type:	178
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Conductor

AWG	Stranding	Nom. Diameter	Material
30	7x38	0.012 in	SCCS - Silvered Copper Covered Steel

Insulation

Material	Nom. Diameter
PTFE - Polytetrafluoroethylene	0.033 in

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.071 in

Electrical Characteristics

VSWR

Frequency [MHz]	Max. VSWR
50 MHz - 1000 MHz	per M17/93-RG178

Attenuation

Frequency	Nom. Attenuation [dB/100ft]
1 MHz	2.6 dB/100ft
10 MHz	5.6 dB/100ft
50 MHz	10.5 dB/100ft
100 MHz	14.0 dB/100ft
200 MHz	19.0 dB/100ft
400 MHz	28.0 dB/100ft
700 MHz	37.0 dB/100ft
900 MHz	42.5 dB/100ft
1000 MHz	46.0 dB/100ft

Power Rating

Frequency [MHz]	Max. Power Rating [W]
50 MHz	380 W
100 MHz	253 W
200 MHz	170 W
400 MHz	113 W
700 MHz	81 W
900 MHz	70 W
1,000 MHz	66 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity
232 Ohm/1000ft	14.6 Ohm/1000ft	29 pF/ft	50 Ohm	70%

Voltage

UL Voltage Rating	Non-UL Voltage Rating
30 V (UL AWM 1637)	750 V (Mil-Spec)

Mechanical Characteristics

Temperature

UL Rating	Operating
90°C (UL AWM 1637)	-70°C to +200°C

Bend Radius

Installation Min.
0.7 in

Bulk Cable Weight:	5 lbs/1000ft
Max. Pull Tension:	12 lbs

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor
Sustainability:	CA Prop 65
AWM Compliance:	1637
Military Compliance:	Commercial, non-QPL product (M17/93-RG178)
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.334 Revision Date: 05-26-2021
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