

Product: 9914

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid BC, Foil + 95% TC Braid, PVC Jkt, CMG

Product Description

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid Bare Copper Conductor , PE Insulation, Duobond® Foil + 95% Tinned Copper Braid Shield, PVC Jacket, CMG

Technical Specifications

Product Overview

Suitable Applications:	Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification)

Construction Details

RG Type:	8

Conductor

Size	Stranding	Nom. Diameter	Material
10 AWG	Solid	0.103 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene (Foam)	0.285 in (7.24 mm)	White	Gas Injected Foam

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Tinned Copper (TC)		95%

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.403 in (10.2 mm)

Overall Cable Diameter (Nominal):	0.403 in (10.2 mm)

Electrical Characteristics

VSWR

Frequency	Max. VSWR
5-2250 MHz	1.43:1

Attenuation

Frequency	Nom. Attenuation
5 MHz	0.4 dB/100ft
10 MHz	0.5 dB/100ft
50 MHz	1.0 dB/100ft
100 MHz	1.4 dB/100ft
200 MHz	1.8 dB/100ft
400 MHz	2.6 dB/100ft
700 MHz	3.6 dB/100ft

900 MHz	4.1 dB/100ft
1000 MHz	4.4 dB/100ft
1500 MHz	5.5 dB/100ft
1800 MHz	6.1 dB/100ft
2000 MHz	6.5 dB/100ft
2500 MHz	7.5 dB/100ft
3000 MHz	8.3 dB/100ft
4000 MHz	9.9 dB/100ft

Power Rating

Frequency	Max. Power Rating
5 MHz	4,021 W
10 MHz	3,217 W
50 MHz	1,609 W
100 MHz	1,149 W
200 MHz	894 W
400 MHz	619 W
700 MHz	447 W
1,000 MHz	366 W
1,500 MHz	293 W
2,000 MHz	248 W
2,500 MHz	215 W
3,000 MHz	194 W
4,000 MHz	163 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
1.0 Ohm/1000ft	1.3 Ohm/1000ft (4.3 Ohm/km)	24.8 pF/ft (81.4 pF/m)	50 Ohm	82%

Voltage

UL Voltage Rating	Voltage Rating
300 V (CMG), 30 V (UL AWM 1354)	600 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C to +80°C

Bend Radius

Installation Min.
4.0 in (100 mm)

Max. Pull Tension:	247 lbs (112 kg)
Bulk Cable Weight:	105 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 FT4 Loading
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CMG
AWM Compliance:	AWM 1354
CEC / C(UL) Compliance:	CMG
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)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.532 Revision Date: 04-13-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
9914.00305	Black	Reel	305 m	8719605023544
9914 010500	Black	Reel	500 ft	612825268901
9914 0101000	Black	Reel	1,000 ft	612825261780

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