



**Product:** [9913F7](#)

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Str BC, Foil + 90% TC Braid, PVC Jkt, Flexible

### Product Description

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG (7x18) Bare Copper Conductor , PE Insulation, Foil + 90% Tinned Copper Braid Shield, PVC Jacket, Flexible

### 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)
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#### Construction Details

RG Type:	8
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#### Conductor

Size	Stranding	Nom. Diameter	Material
10 AWG	7x18	0.108 in	BC - Bare Copper

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.284 in (7.21 mm)	White

#### 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)		90%

#### Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.405 in (10.3 mm)

Overall Cable Diameter (Nominal):	0.405 in (10.3 mm)
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#### Electrical Characteristics

#### VSWR

Frequency	Max. VSWR
5-2250 MHz	1.43:1

#### Attenuation

Frequency	Nom. Attenuation
10 MHz	0.6 dB/100ft
50 MHz	1.1 dB/100ft
100 MHz	1.5 dB/100ft
200 MHz	2.0 dB/100ft
400 MHz	3.0 dB/100ft
700 MHz	4.0 dB/100ft
900 MHz	4.7 dB/100ft

1000 MHz	5.0 dB/100ft
2000 MHz	7.5 dB/100ft
2250 MHz	8.0 dB/100ft
3000 MHz	9.8 dB/100ft
4000 MHz	12.1 dB/100ft

#### Power Rating

Frequency	Max. Power Rating
5 MHz	3,217 W
10 MHz	2,681 W
50 MHz	1,463 W
100 MHz	1,073 W
200 MHz	805 W
400 MHz	575 W
700 MHz	424 W
1,000 MHz	350 W
1,500 MHz	278 W
2,000 MHz	237 W
3,000 MHz	188 W
4,000 MHz	157 W

#### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
1.1 Ohm/1000ft	1.8 Ohm/1000ft (5.9 Ohm/km)	22.5 pF/ft (73.8 pF/m)	52 Ohm	85%

#### Voltage

Voltage Rating
600 V

Electrical Characteristics Notes: Actual Impedance specification is 51.5 +/- 2 ohms.

## Mechanical Characteristics

#### Temperature

Operating
-40°C to +80°C

#### Bend Radius

Installation Min.
4 in (100 mm)

Max. Pull Tension:	210 lbs (95 kg)
Bulk Cable Weight:	104 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor (Not Riser or Plenum), Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
CPR Compliance:	CPR Euroclass: Eca
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: 0.521 Revision Date: 04-13-2023
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## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
9913F7 B59100	Black, Matte	Reel	100 ft	612825261728
9913F7 B59250	Black, Matte	Reel	250 ft	612825261742
9913F7 B59500	Black, Matte	Reel	500 ft	612825261773
9913F7 B591000	Black, Matte	Reel	1,000 ft	612825261735

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