



**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

## Part Numbers

#### Variants

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

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