

# Product: <u>7807A</u> ☑

50 Ohm Wireless Transmission Coax, RF 200, RG58, 17 AWG Solid BC, Foil + 95% TC Braid, PE Jkt

# **Product Description**

50 Ohm Wireless Transmission Coax, RF 200, RG58, 17 AWG Solid Bare Copper Conductor, PE Insulation, Duofoil® + 95% Tinned Copper Braid Shield, PE Jacket

# **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, RF Frequency Identification)	ID (Radio
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# **Construction Details**

RG Type: 58	

# Conductor

Size	Stranding	Nom. Diameter	Material
17 AWG	Solid	0.044 in	BC - Bare Copper

#### Insulation

Material	Nom. Insulation Diameter
PE - Polyethylene (Foam)	0.116 in (2.95 mm)

#### Outer Shield

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

#### Outer Jacket

# **Electrical Characteristics**

## VSWR

Frequency	Max. VSWR
5 - 6000 MHz	1.25:1

## Attenuation

Frequency	Nom. Attenuation
5 MHz	0.75 dB/100ft
10 MHz	1.1 dB/100ft
30 MHz	1.6 dB/100ft
50 MHz	2.1 dB/100ft
150 MHz	3.7 dB/100ft
220 MHz	4.5 dB/100ft
450 MHz	6.5 dB/100ft
900 MHz	9.2 dB/100ft

1500 MHz	12 dB/100ft
1800 MHz	13.2 dB/100ft
2000 MHz	14 dB/100ft
2500 MHz	15.7 dB/100ft
3000 MHz	17.5 dB/100ft
4500 MHz	22 dB/100ft
5800 MHz	25.2 dB/100ft
6000 MHz	26 dB/100ft

#### Power Rating

Frequency	Max. Power Rating
30 MHz	1,070 W
50 MHz	813 W
150 MHz	450 W
220 MHz	372 W
450 MHz	256 W
900 MHz	178 W
1,500 MHz	136 W
2,000 MHz	117 W
2,500 MHz	104 W
3,500 MHz	87 W
4,500 MHz	76 W
6,000 MHz	66 W

#### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
5.4 Ohm/1000ft (18 Ohm/km)	3.6 Ohm/1000ft (12 Ohm/km)	23.5 pF/ft (77.1 pF/m)	50 Ohm	85%

#### Voltage

Voltage Ratin
300 V

#### **Mechanical Characteristics**

#### Temperature

Operating -30°C to +75°C	
Max. Pull Tension:	25.4 lbs (11.5 kg)
Bulk Cable Weight:	27 lbs/1000ft

## **Standards and Compliance**

Environmental Suitability:	Indoor/Outdoor, Indoor, Aerial - Black only, When supported by messenger wire		
Sustainability:	CA Prop 65		
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: 0.324 Revision Date: 04-08-2022

# Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
7807A 010500	Black	Reel	500 ft	612825189640
7807A 0101000	Black	Reel	1,000 ft	612825189633

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