Belden



Product: 7806A

50 Ohm Wireless Transmission Coax, RF 195, RG58, 19 AWG Solid BC, Foil + 90% TC Braid, PE Jkt

Product Description

50 Ohm Wireless Transmission Coax, RF 195, RG58, 19 AWG Solid Bare Copper Conductor, PE Insulation, Duofoil® + 90% 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, RFID (Radio Frequency Identification)

Construction Details

RG Type:	58

Conductor

Size	Stranding	Nom. Diameter	Material
19 AWG	Solid	0.037 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.110 in (2.79 mm)	White

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
2	Braid	Tinned Copper (TC)		90%

Outer Jacket

Material	Nom. Diameter
PE - Polyethylene	0.195 in (4.95 mm)

Overall Cable Diameter (Nominal):	0.195 in (4.95 mm)

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 dB/100ft
30 MHz	1.8 dB/100ft
50 MHz	2.5 dB/100ft
150 MHz	4 dB/100ft
220 MHz	4.9 dB/100ft
450 MHz	7.1 dB/100ft
900 MHz	10.3 dB/100ft

1500 MHz	13.7 dB/100ft
1800 MHz	15.2 dB/100ft
2000 MHz	16.1 dB/100ft
2500 MHz	18.3 dB/100ft
3000 MHz	20.5 dB/100ft
4500 MHz	26.5 dB/100ft
5800 MHz	31.2 dB/100ft
6000 MHz	32 dB/100ft

Power Rating

Frequency	Max. Power Rating
30 MHz	890 W
50 MHz	694 W
150 MHz	403 W
220 MHz	336 W
450 MHz	231 W
900 MHz	162 W
1,500 MHz	124 W
2,000 MHz	107 W
2,500 MHz	95 W
3,500 MHz	80 W
4,500 MHz	70 W
6,000 MHz	61 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
7.6 Ohm/1000ft	4.2 Ohm/1000ft (14 Ohm/km)	24.3 pF/ft (79.7 pF/m)	50 Ohm	77%

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating
-40°C to +80°C

Bend Radius

Installation Min.
0.5 in (13 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	23 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: 0.513 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7806A 010500	Black	Reel	500 ft	612825189602	C
7806A 0101000	Black	Reel	1,000 ft	612825189596	C

Footnote:	C - CRATE REEL PUT-UP.

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