

Product: 7805

50 Ohm Wireless Transmission Coax, RF 100, RG174, 25 AWG Solid BC, Foil + 90% TC Braid, PVC Jkt

Product Description

50 Ohm Wireless Transmission Coax, RF 100, RG174, 25 AWG Solid Bare Copper Conductor, PE Insulation, Beldfoil® + 90% Tinned Copper Braid Shield, PVC 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:	174

Conductor

Size	Stranding	Nom. Diameter	Material
25 AWG	Solid	0.018 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	0.061 in (1.5 mm)	White

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.110 in (2.79 mm)

Overall Cable Diameter (Nominal):	0.110 in (2.79 mm)

Electrical Characteristics

VSWR

Frequency	Max. VSWR
5 - 6000 MHz	1.25:1

Attenuation

Frequency	Nom. Attenuation	Max. Attenuation
5 MHz	1.5 dB/100ft	
10 MHz	2.2 dB/100ft	
30 MHz	3.8 dB/100ft	3.9 dB/100ft
50 MHz	4.9 dB/100ft	5.1 dB/100ft
150 MHz	8.6 dB/100ft	8.8 dB/100ft
220 MHz	10.4 dB/100ft	10.7 dB/100ft
450 MHz	15.2 dB/100ft	15.5 dB/100ft

900 MHz	22.0 dB/100ft	22.5 dB/100ft
1500 MHz	28.7 dB/100ft	30.2 dB/100ft
1800 MHz	31.7 dB/100ft	33.5 dB/100ft
2000 MHz	33.4 dB/100ft	35.6 dB/100ft
2500 MHz	37.8 dB/100ft	40.8 dB/100ft
3000 MHz	42.0 dB/100ft	45.8 dB/100ft
3500 MHz	45.4 dB/100ft	49.5 dB/100ft
4500 MHz	52.3 dB/100ft	56.8 dB/100ft
5800 MHz	60.9 dB/100ft	64.3 dB/100ft
6000 MHz	62.0 dB/100ft	65.4 dB/100ft

Power Rating

Frequency	Max. Power Rating
30 MHz	216 W
50 MHz	154 W
150 MHz	74 W
220 MHz	57 W
450 MHz	34 W
900 MHz	21 W
1,500 MHz	14 W
2,000 MHz	12 W
2,500 MHz	10 W
3,500 MHz	8 W
4,500 MHz	7 W
6,000 MHz	5 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
32 Ohm/1000ft	9.1 Ohm/1000ft (30 Ohm/km)	31.2 pF/ft (102 pF/m)	50 Ohm	66%

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating
-40°C to +75°C

Bend Radius

Installation Min.
0.25 in (6.4 mm)

Max. Pull Tension:	16 lbs (7.3 kg)
Bulk Cable Weight:	9 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: 0.479 Revision Date: 04-13-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7805 010100	Black	Reel	100 ft	612825189527	E
7805 010500	Black	Reel	500 ft	612825189541	
7805 0101000	Black	Reel	1,000 ft	612825189534	

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