

Product: 7805R

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

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, CMR

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	0.020 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.060 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
5 MHz	1.4 dB/100ft
10 MHz	2 dB/100ft
30 MHz	3.5 dB/100ft
50 MHz	4.6 dB/100ft
150 MHz	8.0 dB/100ft
220 MHz	9.6 dB/100ft
450 MHz	14.0 dB/100ft

900 MHz	20.2 dB/100ft
1500 MHz	26.6 dB/100ft
1800 MHz	29.5 dB/100ft
2000 MHz	31.2 dB/100ft
2500 MHz	35.4 dB/100ft
3000 MHz	39.4 dB/100ft
3500 MHz	43.0 dB/100ft
4500 MHz	50.0 dB/100ft
5800 MHz	59.0 dB/100ft
6000 MHz	60.6 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.
27.3 Ohm/1000ft	9.3 Ohm/1000ft (31 Ohm/km)	26.2 pF/ft (86.0 pF/m)	50 Ohm	74%

Voltage

UL Voltage Rating
300 V (CMR, CMG)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C to +80°C

Bend Radius

Installation Min.
0.25 in (6.4 mm)

Max. Pull Tension:	20 lbs (9.1 kg)
Bulk Cable Weight:	9 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1666 Vertical Shaft
NEC / UL Compliance:	CMR
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), 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: 0.493 Revision Date: 04-13-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7805R 008100	Gray	Reel	100 ft	612825189558	E
7805R 008500	Gray	Reel	500 ft	612825189572	
7805R 0081000	Gray	Reel	1,000 ft	612825189565	

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