

Product: [7809R](#) 



50 Ohm Wireless Transmission Coax, RF 300, 13 AWG Solid BC, Foil + 95% TC Braid, PVC Jkt, CMR

Product Description

50 Ohm Wireless Transmission Coax, RF 300, 13 AWG Solid Bare Copper Conductor, PE Insulation, Duobond® Foil + 95% 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)
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Nom. Diameter	Material
Coax(es)	1	13 AWG	Solid	0.072 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.19 in (4.8 mm)	White

Insulation Table Notes:	Gas Injected
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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)		95%

Outer Shield Table Notes:	Splicing Tape
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Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.3 in (7.6 mm)

Overall Cable Diameter (Nominal):	0.3 in (7.6 mm)
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Electrical Characteristics

VSWR

Frequency	Max. VSWR
5-6000 MHz	1.25:1

Attenuation

Frequency	Nom. Attenuation
5 MHz	0.45 dB/100ft
10 MHz	0.6 dB/100ft
30 MHz	1 dB/100ft
50 MHz	1.3 dB/100ft
150 MHz	2.2 dB/100ft
220 MHz	2.7 dB/100ft
450 MHz	3.9 dB/100ft

900 MHz	5.6 dB/100ft
1500 MHz	7.3 dB/100ft
1800 MHz	8.1 dB/100ft
2000 MHz	8.6 dB/100ft
2500 MHz	9.7 dB/100ft
3000 MHz	10.8 dB/100ft
3500 MHz	11.8 dB/100ft
4500 MHz	13.5 dB/100ft
5800 MHz	15.8 dB/100ft
6000 MHz	16 dB/100ft

Power Rating

Frequency	Max. Power Rating
30 MHz	2,161 W
50 MHz	1,658 W
150 MHz	928 W
220 MHz	758 W
450 MHz	522 W
900 MHz	367 W
1,500 MHz	278 W
2,000 MHz	239 W
2,500 MHz	212 W
3,500 MHz	179 W
4,500 MHz	157 W
6,000 MHz	135 W
4,500 MHz	157 W
5,800 MHz	137 W
6,000 MHz	135 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
2.16 Ohm/1000ft (7.09 Ohm/km)	3.1 Ohm/1000ft (10 Ohm/km)	23 pF/ft (75 pF/m)	50 Ohm	86%

Voltage

UL Voltage Rating
300 V RMS

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
3 in (76 mm)	3 in (76 mm)

Max. Pull Tension:	135 lbs (61.2 kg)
Bulk Cable Weight:	61 lbs/1000ft (91 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, 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)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.610 Revision Date: 12-18-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7809R 010500	Black	Reel	500 ft	612825189763	C
7809R 0101000	Black	Reel	1,000 ft	612825189756	C

Footnote:	C - CRATE REEL PUT-UP.
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