

Product: <u>7807R</u> ☑





Product Description

RF 200, RG-58 type, 17 AWG solid .044" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® (100% coverage); tinned copper braid shield (95% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor AWG Stranding Material Nominal Diameter No. of Coax 17 Solid BC - Bare Copper 0.044 in 1 Conductor Count: 1 Insulation Material Nominal Diameter PE - Polyethylene (Foam) 0.116 in Table Notes: Gas Injected

Outer Shield

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

Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.195 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
3.3 Ohm/1000ft	3.3 Ohm/1000ft	4.2 Ohm/1000ft	4.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield 23.5 pF/ft

Inductance

Nominal Inductance

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz] Nom. Insertion Loss

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

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.19 ns/ft	85%

Power Rating

Frequency [MHz]	Max. Power Rating [W]
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
4,500 MHz	76 W
5,800 MHz	67 W
6,000 MHz	66 W

Voltage

UL Voltage Rating 300 V RMS

VSWR

Frequency [MHz]	Max. VSWR
5-6000 MHz	1.25:1

Temperature Range

UL Temp Rating:	60°C
Operating Temperature Range:	-40°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	27 lbs/1000ft
Max. Pull Tension:	25.4 lbs
Min. Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
CPR Euroclass:	Eca
RG Type:	58

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7807R 010500	Black	Reel	500 ft	612825189664
7807R 0101000	Black	Reel	1,000 ft	612825189657
Footnote:				

History

Update and Revision:	Revision Number: 0.408 Revision Date: 12-19-2022

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