BELDEN
SENDING ALL THE RIGHT SIGNALS

Part Number: 7806R



RF 195 Wireless Coax, RG58, 19 AWG, CMR/CMG

Product Description

RG-58 type, 19 AWG solid .037" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® (100% coverage); tinned copper braid shield (90% coverage), PVC jacket.

Technical Specifications

Product Overview

Environmental Space:	Indoor - Riser

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
19	Solid	BC - Bare Copper	0.037 in	1

Conductor Count:	1
Conductor Size:	19 AWG

Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.11 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		90 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.195 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
7.6 Ohm/1000ft	4.2 Ohm/1000ft	4.2 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
24.3 pF/ft

Inductance

Nominal Inductance
0.064 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	0.75 dB/100ft
10 MHz	1 dB/100ft
30 MHz	2 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

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.32 ns/ft	77 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
30 MHz	2.6 dB/100ft
50 MHz	3 dB/100ft
150 MHz	4.3 dB/100ft
220 MHz	5.3 dB/100ft
450 MHz	7.6 dB/100ft
900 MHz	11 dB/100ft
1500 MHz	14.5 dB/100ft
1800 MHz	16.1 dB/100ft
2000 MHz	17.1 dB/100ft
2500 MHz	19.5 dB/100ft
3000 MHz	21.8 dB/100ft
3500 MHz	24 dB/100ft
4500 MHz	27.9 dB/100ft
5800 MHz	33 dB/100ft
6000 MHz	33.7 dB/100ft

Power Rating

Frequency [MHz]	Max. Power Rating [W]
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
4,500 MHz	70 W
5,800 MHz	62 W
6,000 MHz	61 W

Voltage

UL Voltage Rating

300 V RMS

VSWR

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

Temperature Range

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

Mechanical Characteristics

Bulk Cable Weight:	27 lbs/1000ft
Max Recommended Pulling Tension:	40 lbs
Min Bend Radius/Minor Axis:	1.75 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
RG Type:	58/U Type
Series Type:	RF 195
Other Specification:	CEC/C(UL): CMG

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	UPC	Length	Footnote
7806R 0101000	Black	612825189619	1,000 ft	C
7806R 010500	Black	612825414438	500 ft	C

Footnote:	C - CRATE REEL PUT-UP.

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