



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.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	19	Solid	BC - Bare Copper	.037

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.110

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	90

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.195 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

UL Temperature Rating: 80°C

Bulk Cable Weight: 26 lbs/1000 ft.

Max. Recommended Pulling Tension: 40 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.900 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	58/U
Series Type:	RF 195

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by a messenger

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/ft)
.064

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
24.3

Nominal Velocity of Propagation:

VP (%)
77

Nominal Delay:

Delay (ns/ft)
1.27

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
7.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.2

Maximum VSWR:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
		5	6000	1.25:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
30	2.0
50	2.5
150	4.0
220	4.9
450	7.1
900	10.3
1500	13.7
1800	15.2
2000	16.1

2500	18.3
3000	20.5
4500	26.5
5800	31.2
6000	32.0

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	890
50	694
150	403
220	336
450	231
900	162
1500	124
1800	113
2000	107
2500	95
3000	87
3500	80
4500	70
5800	62
6000	61

Max. Operating Voltage - UL:

Voltage
300 V RMS

Notes (Overall)

Notes: 100% Sweep tested. 6 GHz. Belden® The Wire in Wireless®

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7806R 0101000	1,000 FT	27.000 LB	BLACK	C	RF195 WIRELESS 50OHM COAXFRPVC
7806R 010500	500 FT	16.500 LB	BLACK	C	RF195 WIRELESS 50OHM COAXFRPVC

Notes:

C = CRATE REEL PUT-UP.

Low Loss 50 Ohm Wireless RF Transmission Cable

RG-58 Type

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

RG-58 Type • 19 AWG Solid .037" Bare Copper Conductor • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (90% Coverage)

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket

RF195 80°C	7806A	—	500	152.4	14.5	6.6	19 AWG (solid) .037" BC 7.6Ω/M' 24.9Ω/km	.110	2.79	Duofoil + 90% TC Braid 4.2Ω/M' 13.8Ω/km	.195	4.95	50	77%	24.3	79.7	30	2.0	6.6																							
			1000	304.8	23.0	10.4											50	2.5	8.2	150	4.0	13.3	220	4.9	16.1	450	7.1	23.4	900	10.3	33.8	1500	13.7	44.8	1800	15.2	49.7	2000	16.1	52.8	2500	18.3



100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.
Belden® The Wire in Wireless.

Mates with standard RG-58 connectors.*
Suitable for Outdoor and Direct Burial applications.

Gas-injected Foam HDPE Insulation • Black PVC Jacket

RF195 80°C	7806R	NEC:	500	152.4	16.5	7.5	19 AWG (solid) .037" BC 7.6Ω/M' 24.9Ω/km	.110	2.79	Duofoil + 90% TC Braid 4.2Ω/M' 13.8Ω/km	.195	4.95	50	77%	24.3	79.7	30	2.0	6.6																								
		CMR	1000	304.8	27.0	12.3											50	2.5	8.2	150	4.0	13.3	220	4.9	16.1	450	7.1	23.4	900	10.3	33.8	1500	13.7	44.8	1800	15.2	49.7	2000	16.1	52.8	2500	18.3	60.1



CMG FT4

100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.
Belden® The Wire in Wireless.

Mates with standard RG-58 connectors.*

RG-58 Type • 17 AWG Solid .044" Bare Copper Conductor • Duofoil (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Gas-injected Foam HDPE Insulation • Black Polyethylene Jacket

RF200 80°C	7807A	—	500	152.4	15.0	6.8	17 AWG (solid) .044" BC 3.3Ω/M' 10.9Ω/km	.116	2.95	Duofoil + 95% TC Braid 4.2Ω/M' 13.8Ω/km	.195	4.95	50	85%	23.5	77.1	30	1.6	5.4																							
			1000	304.8	24.0	10.9											50	2.1	7.0	150	3.7	12.1	220	4.5	14.6	450	6.5	21.2	900	9.2	30.1	1500	12.0	39.2	1800	13.2	43.2	2000	14.0	45.8	2500	15.7



100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.
Belden® The Wire in Wireless.

Mates with standard Land Mobile Radio type connectors.*
Suitable for Outdoor and Direct Burial applications.

Gas-injected Foam HDPE Insulation • Black PVC Jacket

RF200 80°C	7807R	NEC:	500	152.4	13.5	6.1	17 AWG (solid) .044" BC 3.3Ω/M' 10.9Ω/km	.116	2.95	Duofoil + 95% TC Braid 4.2Ω/M' 13.8Ω/km	.195	4.95	50	85%	23.5	77.1	30	1.6	5.4																								
		CMR	1000	304.8	27.0	12.3											50	2.1	7.0	150	3.7	12.1	220	4.5	14.6	450	6.5	21.2	900	9.2	30.1	1500	12.0	39.2	1800	13.2	43.2	2000	14.0	45.8	2500	15.7	51.6



CMG FT4

100% Sweep tested. 6 GHz. Max. VSWR 1.25:1.
Belden® The Wire in Wireless.

Mates with standard Land Mobile Radio type connectors.*

BC = Bare Copper • DCR = DC Resistance • HDPE = High-density Polyethylene • TC = Tinned Copper