



## Description:

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

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	17	Solid	BC - Bare Copper	.044

### Insulation

#### Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.116

### 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	95

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

### Overall Cabling

Overall Nominal Diameter: 0.195 in.

## Mechanical Characteristics (Overall)

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

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 26 lbs/1000 ft.

Max. Recommended Pulling Tension: 25.400 lbs.

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

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

EU CE Mark: No

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 200

### Suitability

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

### 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)

.061

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

23.5

### Nominal Velocity of Propagation:

VP (%)

85

### Nominal Delay:

Delay (ns/ft)

1.19

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

3.3

### 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	1.6
50	2.1
150	3.7
220	4.5
450	6.5
900	9.2
1500	12.0
1800	13.2
2000	14.0
2500	15.7
3000	17.5
4500	22.0
5800	25.2
6000	26.0

### Max. Power Rating:

Freq. (MHz) Rating (W)

30	1070
50	813
150	450
220	372
450	256
900	178
1500	136
1800	123
2000	117
2500	104
3000	94
3500	87
4500	76
5800	67
6000	66

**Max. Operating Voltage - Non-UL:**

<b>Voltage</b>
300 V RMS

**Sweep Test**

**Sweep Testing:** 100% Sweep tested to 6 GHz

**Notes (Overall)**

**Notes:** Belden® The Wire in Wireless®

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7807A 0101000	1,000 FT	24.000 LB	BLACK	C	RF200 WIRELESS 50 OHM COAX PE
7807A 010500	500 FT	15.000 LB	BLACK	C	RF200 WIRELESS 50 OHM COAX PE

**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	60.1
																	3000	20.5	67.3
																	4500	26.5	86.8
																	5800	31.2	102.4
																	6000	32.0	105.0

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
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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
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																	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
																	3000	17.5	57.3
																	4500	22.0	72.3
																	5800	25.2	82.7
																	6000	26.0	85.1

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