

## 7806R Coax - RG-58 Type

For more Information  
please call

1-800-Belden1



### 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 Cable

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 |
|---------------|----|

## 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®

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc                      |
|---------------|----------|-------------|-------|-------|--------------------------------|
| 7806R 0101000 | 1,000 FT | 28.000 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.

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