

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, LSOH, Toxicity Testing

| | |
|--------------------|-----------------------|
| UL Flammability: | UL1666 Vertical Shaft |
| CSA Flammability: | FT4 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Footnote |
|---------------|-------|----------|
| 7806R 0101000 | Black | C |
| 7806R 010500 | Black | C |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

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