




**Product:** [7806A](#) 

50 Ohm Wireless Transmission Coax, RF 195, RG58, 19 AWG Solid BC, Foil + 90% TC Braid, PE Jkt

### Product Description

50 Ohm Wireless Transmission Coax, RF 195, RG58, 19 AWG Solid Bare Copper Conductor, PE Insulation, Duofoil® + 90% Tinned Copper Braid Shield, PE Jacket

### Technical Specifications

#### Product Overview

|                        |  |
|------------------------|--|
| Suitable Applications: | Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification) |
|------------------------|--|

#### Construction Details

|          |    |
|----------|----|
| RG Type: | 58 |
|----------|----|

#### Conductor

| AWG | Stranding | Nom. Diameter | Material         |
|-----|-----------|---------------|------------------|
| 19  | Solid     | 0.037 in      | BC - Bare Copper |

#### Insulation

| Material                 | Nom. Diameter |
|--------------------------|---------------|
| PE - Polyethylene (Foam) | 0.110 in      |

#### Outer Shield

| Layer | Outer Shield Type | Material                      | Material Trade Name | Coverage |
|-------|-------------------|-------------------------------|---------------------|----------|
| 1     | Tape              | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%     |
| 2     | Braid             | Tinned Copper (TC)            |                     | 90%      |

#### Outer Jacket

| Material          | Nom. Diameter |
|-------------------|---------------|
| PE - Polyethylene | 0.195 in      |

#### Electrical Characteristics

#### VSWR

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

#### Attenuation

| Frequency | Nom. Attenuation [dB/100ft] |
|-----------|-----------------------------|
| 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   |

#### 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                  |

#### Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity |
|--------------------|-----------------------|---------------------------------|-------------------------------|---------------|
| 7.6 Ohm/1000ft     | 4.2 Ohm/1000ft        | 24.3 pF/ft                      | 50 Ohm                        | 77%           |

#### Voltage

| Non-UL Voltage Rating |
|-----------------------|
| 300 V                 |

## Mechanical Characteristics

#### Temperature

| Operating      |
|----------------|
| -30°C to +75°C |

|                    |               |
|--------------------|---------------|
| Bulk Cable Weight: | 23 lbs/1000ft |
| Max. Pull Tension: | 40 lbs        |

## Standards and Compliance

|                                |  |
|--------------------------------|--|
| Environmental Suitability:     | Indoor/Outdoor, Indoor   |
| Sustainability:                | CA Prop 65   |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:               | China RoHS II (GB/T 26572-2011)  |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.344 Revision Date: 05-26-2021 |
|----------------------|--|

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