



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

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

Insulation

| Material                 | Nom. Insulation Diameter | Color Code |
|--------------------------|--------------------------|------------|
| PE - Polyethylene (Foam) | 0.110 in (2.79 mm)       | White      |

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 (4.95 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.195 in (4.95 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

VSWR

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

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 5 MHz     | 0.75 dB/100ft    |
| 10 MHz    | 1 dB/100ft       |
| 30 MHz    | 1.8 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 | Max. Power Rating |
|-----------|-------------------|
| 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 of Prop. |
|--------------------|----------------------------|---------------------------------|-------------------------------|------------------------|
| 7.6 Ohm/1000ft     | 4.2 Ohm/1000ft (14 Ohm/km) | 24.3 pF/ft (79.7 pF/m)          | 50 Ohm                        | 77%                    |

Voltage

| Voltage Rating |
|----------------|
| 300 V          |

Mechanical Characteristics

Temperature

| Operating      |
|----------------|
| -40°C to +80°C |

Bend Radius

| Installation Min. |
|-------------------|
| 0.5 in (13 mm)    |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 40 lbs (18 kg) |
| Bulk Cable Weight: | 23 lbs/1000ft  |

Standards and Compliance

|                                |  |
|--------------------------------|--|
| Environmental Suitability:     | Indoor/Outdoor, Indoor, Aerial - Black only, When supported by messenger wire  |
| 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: 0.511 Revision Date: 04-29-2024 |
|----------------------|--|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 7806A 010500  | Black | Reel       | 500 ft   | 612825189602 | C        |
| 7806A 0101000 | Black | Reel       | 1,000 ft | 612825189596 | C        |

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