# 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, Outdoor - Black only, 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: 0.512 Revision Date: 02-03-2025 |

## 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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