




Product: [7733A](#) 

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid BC, Foil + 90% TC Braid, PVDF Jkt, CMP, Low Loss

Product Description

50 Ohm Wireless Transmission Coax, RG-8, 10 AWG Solid Bare Copper Conductor , FEP Insulation, Foil + 90% Tinned Copper Braid Shield, PVDF Jacket, CMP, Low Loss

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: | 8 |
|----------|---|

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|------------------|
| 10 AWG | Solid | 0.108 in | BC - Bare Copper |

Insulation

| Material | Nom. Insulation Diameter |
|---------------------------------------------|--------------------------|
| FEP - Fluorinated Ethylene Propylene (Foam) | 0.280 in (7.11 mm) |

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 |
|--------------------------------|--------------------|
| PVDF - Polyvinylidene Fluoride | 0.355 in (9.02 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.355 in (9.02 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz | 0.1 dB/100ft |
| 10 MHz | 0.4 dB/100ft |
| 50 MHz | 1.1 dB/100ft |
| 100 MHz | 1.5 dB/100ft |
| 200 MHz | 2.1 dB/100ft |
| 400 MHz | 3.2 dB/100ft |
| 700 MHz | 4.5 dB/100ft |
| 900 MHz | 5.7 dB/100ft |
| 1000 MHz | 5.9 dB/100ft |
| 4000 MHz | 14.1 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|-----------------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 0.9 Ohm/1000ft (3.0 Ohm/km) | 1.8 Ohm/1000ft (5.9 Ohm/km) | 24.2 pF/ft (79.4 pF/m) | 50 Ohm | 84% |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|-----------------|
| 150°C | -20°C to +150°C |

Bend Radius

| Installation Min. |
|-------------------|
| 3.6 in |

| | |
|--------------------|-------------------|
| Max. Pull Tension: | 185 lbs (83.9 kg) |
| Bulk Cable Weight: | 100 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability: | Indoor - Plenum, Indoor, Outdoor, UV Resistance |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | NFPA 262 |
| NEC / UL Compliance: | CL2P, CMP |
| CEC / C(UL) Compliance: | CMP |
| 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: 0.345 Revision Date: 04-08-2022 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|-------|------------|----------|--------------|
| 7733A 010500 | Black | Reel | 500 ft | 612825357971 |
| 7733A 0101000 | Black | Reel | 1,000 ft | 612825188926 |

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