



Product: <u>8216</u> ☑

50 Ohm Wireless Transmission Coax, RG-174, 26 AWG Str BCCS, 90% TC Braid, PVC Jkt

Product Description

50 Ohm Wireless Transmission Coax, RG-174, 26 AWG (7x34) Bare Copper Covered Steel Conductor , PE Insulation, 90% Tinned Copper Braid Shield, PVC 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: 174

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|----------------------------------|
| 26 AWG | 7x34 | 0.019 in | BCCS - Bare Copper Covered Steel |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|------------|
| PE - Polyethylene | 0.060 in (1.5 mm) | White |

Outer Shield

| Outer Shield Type | Material | Coverage |
|-------------------|--------------------|----------|
| Braid | Tinned Copper (TC) | 90% |

Outer Jacket

| PVC - Polyvinyl Chloride 0.110 in (2.79 mm) |
|--|
| Overall Cable Diameter (Nominal): 0.110 in (2. |

Electrical Characteristics

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz | 1.9 dB/100ft |
| 10 MHz | 3.3 dB/100ft |
| 50 MHz | 5.8 dB/100ft |
| 100 MHz | 8.4 dB/100ft |
| 200 MHz | 12.5 dB/100ft |
| 400 MHz | 19.0 dB/100ft |
| 700 MHz | 27.0 dB/100ft |
| 900 MHz | 31.0 dB/100ft |
| 1000 MHz | 34.0 dB/100ft |

Power Rating

Frequency Max. Power Rating

| 1 MHz | 976 W |
|-----------|-------|
| 10 MHz | 354 W |
| 50 MHz | 197 W |
| 100 MHz | 161 W |
| 200 MHz | 136 W |
| 400 MHz | 120 W |
| 700 MHz | 112 W |
| 900 MHz | 109 W |
| 1,000 MHz | 108 W |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-------------------------------|---------------------------------|-------------------------------|------------------------|
| 97 Ohm/1000ft | 10.7 Ohm/1000ft (35.1 Ohm/km) | 30.8 pF/ft (101 pF/m) | 50 Ohm | 66% |

Voltage

| UL Voltage Rating | Voltage Rating |
|--------------------|----------------|
| 30 V (UL AWM 1354) | 1100 V |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|--------------------|----------------|
| 60°C (UL AWM 1354) | -30°C to +75°C |

Bend Radius

Installation Min. 1.1 in (28 mm)

| Max. Pull Tension: | 20 lbs (9.1 kg) | l |
|--------------------|-----------------|---|
| Bulk Cable Weight: | 8 lbs/1000ft | l |

Standards and Compliance

| Environmental Suitability: | Outdoor - Aerial, Indoor, Aerial - Black only, When supported by messenger wire |
|-----------------------------------|--|
| Sustainability: | CA Prop 65 |
| CPR Compliance: | CPR Euroclass: Eca; CPR UKCA Class: Eca |
| AWM Compliance: | AWM 1354 |
| 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) |
| UK Regulation Compliance: | UKCA Mark |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

History

| Update and Revision: | Revision Number: 0.536 Revision Date: 04-13-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|--------------|-------|------------|----------|--------------|
| 8216 010100 | Black | Reel | 100 ft | 612825196266 |
| 8216 010500 | Black | Reel | 500 ft | 612825355496 |
| 8216 0101000 | Black | Reel | 1,000 ft | 612825196273 |

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