



Product: [82240](#)

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Solid BC, 95% TC Braid, Flamarrest® Jkt, CMP

Product Description

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Solid Bare Copper Conductor, FEP Insulation, 95% Tinned Copper Braid Shield, Flamarrest® Jacket, CMP

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | 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 |
|--------|-----------|---------------|------------------|
| 20 AWG | Solid | 0.032 in | BC - Bare Copper |

Insulation

| Material | Nom. Insulation Diameter |
|--------------------------------------|--------------------------|
| FEP - Fluorinated Ethylene Propylene | 0.107 in (2.72 mm) |

Outer Shield

| Outer Shield Type | Material | Coverage |
|-------------------|--------------------|----------|
| Braid | Tinned Copper (TC) | 95% |

Outer Jacket

| Material | Nom. Diameter |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.159 in (4.04 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.159 in (4.04 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz | 0.5 dB/100ft |
| 10 MHz | 1.2 dB/100ft |
| 50 MHz | 3.0 dB/100ft |
| 100 MHz | 4.3 dB/100ft |
| 200 MHz | 6.4 dB/100ft |
| 400 MHz | 9.7 dB/100ft |
| 700 MHz | 13.7 dB/100ft |
| 900 MHz | 16.1 dB/100ft |
| 1000 MHz | 17.3 dB/100ft |

Power Rating

| Frequency | Max. Power Rating |
|-----------|-------------------|
| 1 MHz | 4,799 W |
| 10 MHz | 1,937 W |

| | |
|-----------|-------|
| 50 MHz | 782 W |
| 100 MHz | 542 W |
| 200 MHz | 370 W |
| 400 MHz | 248 W |
| 700 MHz | 178 W |
| 900 MHz | 153 W |
| 1,000 MHz | 143 W |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|-------------------------------|----------------------------|---------------------------------|-------------------------------|------------------------|
| 10.1 Ohm/1000ft (33.1 Ohm/km) | 3.8 Ohm/1000ft (12 Ohm/km) | 27.4 pF/ft (89.9 pF/m) | 53 Ohm | 70% |

Voltage

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

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|--------------|
| 75°C | 0°C to +75°C |

Bend Radius

| Installation Min. |
|-------------------|
| 1.6 in |

| | |
|--------------------|----------------|
| Max. Pull Tension: | 38 lbs (17 kg) |
| Bulk Cable Weight: | 24 lbs/1000ft |

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | Indoor - Plenum, Indoor |
| Sustainability: | CA Prop 65 |
| Flammability / Reaction to Fire: | NFPA 262 |
| NEC / UL Compliance: | 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) |
| Non-Plenum Number: | 8240 |

History

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|----------------------|--|
| Update and Revision: | Revision Number: 0.331 Revision Date: 04-08-2022 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|----------------|---------|--------------|----------|--------------|
| 82240 010U500 | Black | UnReel | 500 ft | 612825434832 |
| 82240 010Z500 | Black | ReelTuff Box | 500 ft | 612825196440 |
| 82240 010Z1000 | Black | ReelTuff Box | 1,000 ft | 612825434757 |
| 82240 877U500 | Natural | UnReel | 500 ft | 612825434849 |
| 82240 8771000 | Natural | Reel | 1,000 ft | 612825196426 |
| 82240 877U1000 | Natural | UnReel | 1,000 ft | 612825196433 |
| 82240 877Z1000 | Natural | ReelTuff Box | 1,000 ft | 612825196471 |

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