



**Product:** <u>88240</u> ☑

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

# **Product Description**

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

# **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

| AWG | Stranding | Nom. Diameter | Material         |
|-----|-----------|---------------|------------------|
| 20  | Solid     | 0.032 in      | BC - Bare Copper |

# Insulation

| Material                             | Nom. Diameter |
|--------------------------------------|---------------|
| FEP - Fluorinated Ethylene Propylene | 0.107 in      |

## **Outer Shield Material**

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

# Outer Jacket Material

| Material                             | Nom. Diameter |
|--------------------------------------|---------------|
| FEP - Fluorinated Ethylene Propylene | 0.159 in      |

# **Electrical Characteristics**

# Attenuation

| Frequency | Nom. Attenuation [dB/100ft] |
|-----------|-----------------------------|
| 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 [MHz] | Max. Power Rating [W] |
|-----------------|-----------------------|
| 1 MHz           | 4,799 W               |
| 10 MHz          | 1,937 W               |
| 50 MHz          | 782 W                 |

| 100 MHz   | 542 W |
|-----------|-------|
| 200 MHz   | 370 W |
| 400 MHz   | 249 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. Impedence | Nom. Velocity |
|--------------------|-----------------------|---------------------------------|----------------|---------------|
| 10.1 Ohm/1000ft    | 3.8 Ohm/1000ft        | 27.4 pF/ft                      | 53 Ohm         | 70%           |

## Voltage

UL Voltage Rating 300 V (CMP)

# **Mechanical Characteristics**

## Temperature

| <b>UL Rating</b> | Operating       |  |
|------------------|-----------------|--|
| 200°C            | -70°C to +200°C |  |

#### **Bend Radius**

| Installation Mi | n. |
|-----------------|----|
| 1.6 in          |    |

| Bulk Cable Weight: | 26 lbs/1000ft |
|--------------------|---------------|
| Max. Pull Tension: | 39 lbs        |

# **Standards and Compliance**

| Environmental Suitability:        | Indoor - Plenum, Indoor, Outdoor, UV Resistance   |
|-----------------------------------|---|
| Sustainability:                   | CA Prop 65  |
| Flammability / Fire Resistance:   | NFPA 262, NFPA 262  |
| NEC / UL Compliance:              | CMP   |
| CEC / C(UL) Compliance:           | CMP   |
| European Directive<br>Compliance: | EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                  | China RoHS II (GB/T 26572-2011)   |
| Non-Plenum Number:                | 8240  |

# **History**

| Update and Revision: | Revision Number: 0.346 Revision Date: 09-30-2020 |
|----------------------|--|

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