

**Product:** <u>9310</u> ☐

50 Ohm, RG58, 20 AWG



# **Product Description**

RG-58/U type, 20 AWG solid .033" bare copper conductor, polyethylene insulation, Duobond® II + tinned copper braid shield (55% coverage), PVC jacket.

## **Technical Specifications**

#### **Physical Characteristics (Overall)**

# Conductor

| ш |    | Otrainaing | Matorial         | Hommai Biameter | No. or ooux |
|---|----|------------|------------------|-----------------|-------------|
|   | 20 | Solid      | BC - Bare Copper | 0.033 in        | 1           |

Conductor Count: 1

#### Insulation

| Material          | Nominal Diameter |
|-------------------|------------------|
| PE - Polyethylene | 0.114 in         |

#### Outer Shield

| Type  | Layer | Material                      | Material Trade Name | Coverage [%] |
|-------|-------|-------------------------------|---------------------|--------------|
| Tape  | 1     | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%         |
| Braid | 2     | Tinned Copper (TC)            |                     | 55%          |

# Outer Jacket

| Material                 | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.193 in         |

#### **Electrical Characteristics**

#### Conductor DCR

| Nominal Conductor<br>DCR | Nominal Conductor DCR Conductor Resistance | Nominal Outer Shield DCR | Outer Conductor DCR |
|--------------------------|--|--------------------------|---------------------|
| 9.4 Ohm/1000ft           | 9.4 Ohm/1000ft                             | 8 Ohm/1000ft             | 8 Ohm/1000ft        |

## Capacitance

Nom. Capacitance Conductor to Shield 30.8 pF/ft

#### Inductance

Nominal Inductance

#### Impedance

Nominal Characteristic Impedance
50 Ohm

#### High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz           | 0.46 dB/100ft       |

| 10 MHz   | 1.4 dB/100ft  |
|----------|---------------|
| 50 MHz   | 2.8 dB/100ft  |
| 100 MHz  | 3.8 dB/100ft  |
| 200 MHz  | 5.4 dB/100ft  |
| 400 MHz  | 7.9 dB/100ft  |
| 700 MHz  | 11.1 dB/100ft |
| 900 MHz  | 12.8 dB/100ft |
| 1000 MHz | 13.9 dB/100ft |

## Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.54 ns/ft    | 66%                                      |

## Voltage

| Non-UL Voltage Rating | UL Voltage Rating |
|-----------------------|-------------------|
| 1400 V RMS            | 30 V RMS          |

# **Temperature Range**

| Ī | UL Temp Rating:       | 60°C           |
|---|-----------------------|----------------|
|   | Operating Temp Range: | -40°C To +60°C |

## **Mechanical Characteristics**

| Bulk Cable Weight:           | 20 lbs/1000ft |
|------------------------------|---------------|
| Max. Pull Tension:           | 12.4 lbs      |
| Min. Bend Radius/Minor Axis: | 2 in          |

## **Standards**

| UL AWM Style Compliance: | AWM 1354 (30 V 60°C) |
|--------------------------|----------------------|
| CPR Euroclass:           | Eca                  |
| RG Type:                 | 58                   |

# **Applicable Environmental and Other Programs**

| Environmental Space:                         | Indoor/Outdoor                |
|--|-------------------------------|
| EU Directive 2000/53/EC (ELV):               | Yes                           |
| EU Directive 2003/11/EC (BFR):               | Yes                           |
| EU Directive 2011/65/EU (RoHS 2):            | Yes                           |
| EU Directive 2012/19/EU (WEEE):              | Yes                           |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes                           |
| EU Directive Compliance:                     | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                                  | No                            |
| MII Order #39 (China RoHS):                  | Yes                           |

## Suitability

| Suitability - Indoor:  | Yes |
|------------------------|-----|
| Suitability - Outdoor: | Yes |

# Flammability, LS0H, Toxicity Testing

| IEC Flammability:  | IEC 60332-1-2 |
|--------------------|---------------|
| UL voltage rating: | 30 V RMS      |

#### Plenum/Non-Plenum

| Plenum (Y/N): | No |
|---------------|----|
|               |    |

# **Related Part Numbers**

## Variants

| Item #        | Color | Put-Up Type | Length   | UPC          |
|---------------|-------|-------------|----------|--------------|
| 9310 010500   | Black | Reel        | 500 ft   | 612825227793 |
| 9310 0101000  | Black | Reel        | 1,000 ft | 612825227816 |
| 9310 010U1000 | Black | UnReel      | 1,000 ft | 612825227854 |

| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|
| History   |                        |

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Update and Revision:

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