

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)

| Conduc | Conductor | | | |
|--------|-------------|------------------|------------------|-------------|
| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
| 20 | Solid | BC - Bare Copper | 0.033 in | 1 |
| Condu | ctor 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 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

| UL Temp Rating: | 60°C |
|------------------------------|----------------|
| Operating Temperature 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 |