

Product: [9311](#) 

50 Ohm, RG58, 20 AWG, CM



Product Description

RG-58/U type, 20 AWG stranded (19x32) .037" tinned copper conductor, foam polyethylene insulation, Duobond® II, tinned copper braid shield (55% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
|-----|-----------|--------------------|------------------|-------------|
| 20 | 19x32 | TC - Tinned Copper | 0.037 in | 1 |

Conductor Count: 1

Insulation

| Material | Nominal Diameter |
|--------------------------|------------------|
| PE - Polyethylene (Foam) | 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 |
|-----------------------|-----------------------|----------------------|--------------------------|---------------------|
| 8.8 Ohm/1000ft | 8.8 Ohm/1000ft | | 17 Ohm/1000ft | 17 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 26 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.065 µH/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 52 Ohm |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.5 dB/100ft |

| | |
|----------|---------------|
| 10 MHz | 1.5 dB/100ft |
| 50 MHz | 2.9 dB/100ft |
| 100 MHz | 4 dB/100ft |
| 200 MHz | 5.7 dB/100ft |
| 400 MHz | 8.5 dB/100ft |
| 700 MHz | 12.2 dB/100ft |
| 900 MHz | 14.5 dB/100ft |
| 1000 MHz | 15.8 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.36 ns/ft | 75% |

Voltage

| UL Voltage Rating | Voltage Rating [V] |
|------------------------------|--------------------|
| 300 V RMS | 30 V RMS |
| 30 V RMS (UL AWM Style 1354) | |

| | |
|-----------------------------------|---|
| Electrical Characteristics Notes: | 300 V RMS (CM) 30 V RMS (UL AWM Style 1354) |
|-----------------------------------|---|

Temperature Range

| | |
|------------------------------|----------------|
| UL Temp Rating: | 80°C |
| Operating Temperature Range: | -40°C To +80°C |

Mechanical Characteristics

| | |
|------------------------------|---------------|
| Bulk Cable Weight: | 21 lbs/1000ft |
| Min. Bend Radius/Minor Axis: | 2 in |

Standards

| | |
|--------------------------|----------------------|
| NEC/(UL) Compliance: | CM |
| CEC/C(UL) Compliance: | CM |
| UL AWM Style Compliance: | AWM 1354 (30 V 80°C) |
| RG Type: | 58 |

Applicable Environmental and Other Programs

| | |
|--|-------------------------------|
| Environmental Space: | Indoor (Not Riser or Plenum) |
| 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 |
|-----------------------|-----|

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

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

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|---------------|-------|-------------|----------|--------------|
| 9311 010500 | Black | Reel | 500 ft | 612825227847 |
| 9311 0101000 | Black | Reel | 1,000 ft | 612825227861 |
| 9311 010U1000 | Black | UnReel | 1,000 ft | 612825415213 |

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

History

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|----------------------|--|
| Update and Revision: | Revision Number: 0.383 Revision Date: 04-08-2022 |
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