



Product: [9913](#)

Low Loss 50 Ohm, RG8, #10

Product Description

10 AWG solid .108" bare copper conductor, semi-solid polyethylene insulation, Duobond® II, tinned copper braid shield (90% coverage), PVC jacket.

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Environmental Space: | Indoor (Not Riser or Plenum) |
| Suitable Applications: | Low Loss RG-8 50 Ohm Wireless & Antenna |

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
|-----|-----------|------------------|------------------|-------------|
| 10 | Solid | BC - Bare Copper | 0.108 in | 1 |

| | |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

Insulation

| Material | Nominal Diameter |
|---|------------------|
| Semi-Solid PE - Semi-Solid Polyethylene | 0.286 in |

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] |
|-------|-------|-----------------------------|---------------------|--------------|
| Tape | 1 | Aluminum/Polyester/Aluminum | Bonded Duofoil® | 100 % |
| Braid | 2 | TC - Tinned Copper | | 90 % |

Outer Jacket Material

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.405 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--------------------------|---------------------|
| 0.9 Ohm/1000ft | 1.8 Ohm/1000ft | 1.8 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 24.6 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.059 µH/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 50 Ohm |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 5 MHz | 0.4 dB/100ft |
| 10 MHz | 0.5 dB/100ft |
| 50 MHz | 1 dB/100ft |
| 100 MHz | 1.4 dB/100ft |
| 200 MHz | 1.8 dB/100ft |
| 400 MHz | 2.6 dB/100ft |
| 700 MHz | 3.6 dB/100ft |
| 900 MHz | 4.1 dB/100ft |
| 1000 MHz | 4.4 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.2 ns/ft | 84 % |

Power Rating

| Frequency [MHz] | Max. Power Rating [W] |
|-----------------|-----------------------|
| 5 MHz | 4,021 W |
| 10 MHz | 3,217 W |
| 50 MHz | 1,609 W |
| 100 MHz | 1,149 W |
| 200 MHz | 894 W |
| 400 MHz | 619 W |
| 700 MHz | 447 W |
| 900 MHz | 393 W |
| 1,000 MHz | 366 W |

Voltage

| Non-UL Voltage Rating |
|-----------------------|
| 300 V RMS |

Temperature Range

| | |
|-----------------------|----------------|
| Non-UL Temp Rating: | 75°C |
| Operating Temp Range: | -40°C To +80°C |

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Bulk Cable Weight: | 107 lbs/1000ft |
| Max Recommended Pulling Tension: | 300 lbs |
| Min Bend Radius/Minor Axis: | 4 in |

Standards

| | |
|----------------|----------|
| CPR Euroclass: | Eca |
| RG Type: | 8/U Type |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Flammability, LS0H, Toxicity Testing

| | |
|-----------------------|---------------|
| ISO/IEC Flammability: | IEC 60332-1-2 |
|-----------------------|---------------|

Plenum/Non-Plenum

| | |
|----------------|-------|
| Plenum (Y/N): | No |
| Plenum Number: | 89913 |

Part Number

Variants

| Item # | Color | UPC | Length | Footnote |
|--------------|-------|--------------|----------|----------|
| 9913 010100 | Black | 612825261636 | 100 ft | C |
| 9913 0101000 | Black | 612825261643 | 1,000 ft | C |
| 9913 010250 | Black | 612825261650 | 250 ft | C |
| 9913 010500 | Black | 612825261667 | 500 ft | C |
| 9913 0105000 | Black | 612825261711 | 5,000 ft | C |

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

Product Notes

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| Notes: | Recommend use of 7810R, 7810A, 9913F7, or 9914 for applications above 1 GHz. |
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History

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| Update and Revision: | Revision Number: 0.276 Revision Date: 08-22-2019 |
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