



Product: <u>9913F7</u> ☑

Low Loss 52 Ohm, RG8, Flexible 10 AWG Stranded BC, Foil + Braid, Belflex® Jacket

Product Description

Low Loss, RG-8/U type, 10 AWG stranded (7x19) .108" bare copper conductor, gas-injected foam HDPE insulation, Duobond® II, tinned copper braid shield (95% coverage), Belflex® jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor AWG Stranding Material Nominal Diameter No. of Coax BC - Bare Copper 0.108 in 7x19 Conductor Count: Insulation Material **Nominal Diameter** PE - Polyethylene (Foam) 0.285 in Table Notes: Gas Injected Outer Shield Material Type Layer Material Material Trade Name | Coverage [%]

100%

Outer Jacket Material

Tape 1 Braid 2

| Material | Material Trade Name | Nominal Diameter |
|--------------------------|---------------------|------------------|
| PVC - Polyvinyl Chloride | Belflex® | 0.405 in |

Alum / Poly / Alum Bonded Duofoil®

Tinned Copper (TC)

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--------------------------|---------------------|
| 1.1 Ohm/1000ft | 1.8 Ohm/1000ft | 1.8 Ohm/1000ft |

Capacitance

Nom. Capacitance Conductor to Shield 22.5 pF/ft

Inductance

Nominal Inductance 0.059 µH/ft

Impedance

Nominal Characteristic Impedance 52 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz] Nom. Insertion Loss

| 10 MHz | 0.6 dB/100ft |
|----------|---------------|
| 50 MHz | 1.1 dB/100ft |
| 100 MHz | 1.5 dB/100ft |
| 200 MHz | 2 dB/100ft |
| 400 MHz | 3 dB/100ft |
| 700 MHz | 4 dB/100ft |
| 900 MHz | 4.7 dB/100ft |
| 1000 MHz | 5 dB/100ft |
| 2000 MHz | 7.5 dB/100ft |
| 2250 MHz | 8 dB/100ft |
| 3000 MHz | 9.8 dB/100ft |
| 4000 MHz | 12.1 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.2 ns/ft | 85% |

High Freq

| Frequency [MHz] | Max. Insertion Loss (Attenuation) |
|-----------------|-----------------------------------|
| 10 MHz | 0.7 dB/100ft |
| 50 MHz | 1.3 dB/100ft |
| 100 MHz | 1.8 dB/100ft |
| 200 MHz | 2.4 dB/100ft |
| 400 MHz | 3.4 dB/100ft |
| 700 MHz | 4.6 dB/100ft |
| 900 MHz | 5.3 dB/100ft |
| 1000 MHz | 5.6 dB/100ft |
| 2000 MHz | 8.2 dB/100ft |
| 2250 MHz | 8.9 dB/100ft |
| 3000 MHz | 10.9 dB/100ft |
| 4000 MHz | 13.6 dB/100ft |

Power Rating

| Frequency [MHz] | Max. Power Rating [W] | Nominal Power Rating [W] |
|-----------------|-----------------------|--------------------------|
| 5 MHz | 3,217 W | 3,217 W |
| 10 MHz | 2,681 W | 2,681 W |
| 50 MHz | 1,463 W | 1,463 W |
| 100 MHz | 1,073 W | 1,073 W |
| 200 MHz | 805 W | 805 W |
| 400 MHz | 575 W | 575 W |
| 700 MHz | 424 W | 424 W |
| 1,000 MHz | 350 W | 366 W |
| 1,500 MHz | 278 W | 350 W |
| 2,000 MHz | 237 W | 278 W |
| 3,000 MHz | 188 W | 252 W |
| 4,000 MHz | 157 W | 237 W |
| 2,500 MHz | | 210 W |
| 3,000 MHz | | 188 W |
| 4,000 MHz | | 157 W |

Voltage

Non-UL Voltage Rating 300 V RMS

VSWR

Frequency [MHz] 5-2250 MHz

Electrical Characteristics Notes: Actual Impedance specification is 51.5 +/- 2 ohms.

Temperature Range

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

Mechanical Characteristics

| Bulk Cable Weight: | 94 lbs/1000ft |
|-----------------------------|---------------|
| Max. Pull Tension: | 210 lbs |
| Min Bend Radius/Minor Axis: | 3 in |

Standards

| RG Type: | 8/U Type |
|----------|----------|

Applicable Environmental and Other Programs

| Environmental Space: | Indoor (Not Riser or Plenum) |
|---------------------------------------|-------------------------------|
| 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 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | No |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

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

Plenum/Non-Plenum

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

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|----------------|--------------|------------|-----------|--------------|
| 9913F7 B59100 | Black, Matte | Reel | 100 ft | 612825261728 |
| 9913F7 B59250 | Black, Matte | Reel | 250 ft | 612825261742 |
| 9913F7 B59500 | Black, Matte | Reel | 500 ft | 612825261773 |
| 9913F7 B591000 | Black, Matte | Reel | 1,000 ft | 612825261735 |
| Footnote: | | | C - CRATE | REEL PUT-UP. |

Product Notes

| Notes: | Low Loss, High Flex |
|--------|---------------------|
|--------|---------------------|

History

| Update and Revision: | Revision Number: 0.285 Revision Date: 04-28-2020 |
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