



Part Number: 9913F7

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**

# **Product Overview**

| Environmental Space: |                                    | Indoor (N        | lot Riser or Ple |          |             |
|----------------------|------------------------------------|------------------|------------------|----------|-------------|
| Phys                 | Physical Characteristics (Overall) |                  |                  |          |             |
| Conductor            |                                    |                  |                  |          |             |
| AWG                  | Stranding                          | Material         | Nominal I        | Diameter | No. of Coax |
| 10                   | 7x19                               | BC - Bare Copper | 0.108 in         |          | 1           |
|                      |                                    |                  |                  |          |             |
|                      | ctor Count:                        |                  |                  | 1        |             |

#### Insulation

| Material  | Nominal Diameter |
|---|------------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | 0.285 in         |

### Outer Shield Material

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

#### **Outer Jacket Material**

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

#### **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

### 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

#### **Mechanical Characteristics**

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

### **Standards**

| G Type: | RG-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 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                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

### Suitability

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

#### **Part Number**

| - 0.40 D      |    |
|---------------|----|
| Plenum (Y/N): | No |

### Variants

| Item #         | Color        | Footnote |
|----------------|--------------|----------|
| 9913F7 B59100  | BLACK, MATTE | С        |
| 9913F7 B591000 | BLACK, MATTE | С        |
| 9913F7 B59250  | BLACK, MATTE | С        |
| 9913F7 B59500  | BLACK, MATTE | С        |

Footnote: C - CRATE REEL PUT-UP.

### **Product Notes**

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

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