



Part Number: 1694F

Serial Digital Coax, Flexible, RG6 Type, 19 AWG Stranded BC, Double TC braid, CM

### **Product Description**

Low Loss Serial Digital Coax, RG-6/U Type, 19 AWG stranded bare copper conductor, foam HDPE core, double 95% tinned copper braid, CM rated, flexible PVC jacket

### **Technical Specifications**

### **Product Overview**

| Environmental Space:   | Indoor - Riser              |
|------------------------|-----------------------------|
| Suitable Applications: | Digital Video, Analog Video |

#### **Physical Characteristics (Overall)**

#### Conductor

| AWG              | Stranding | Material         | Nomin   | al Diameter | No. of Coax |
|------------------|-----------|------------------|---------|-------------|-------------|
| 19               | Stranded  | BC - Bare Copper | 0.04 in |             | 1           |
| Conductor Count: |           |                  | 1       |             |             |
| Conductor Size:  |           |                  | 19 AWG  |             |             |

#### Insulation

| Material  | Nominal Diameter |
|---|------------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | 0.18 in          |

### **Outer Shield Material**

| Type  | Layer | Material           | Coverage [%] |
|-------|-------|--------------------|--------------|
| Braid | 1     | TC - Tinned Copper | 95 %         |
| Braid | 2     | TC - Tinned Copper | 95 %         |

#### **Outer Jacket Material**

| Material                 | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.276 in         |

## **Electrical Characteristics**

#### **Conductor DCR**

| Nominal Conductor<br>DCR | Nominal Outer Shield DCR | Outer Conductor DCR |
|--------------------------|--------------------------|---------------------|
| 8.5 Ohm/1000ft           | 1.7 Ohm/1000ft           | 1.7 Ohm/1000ft      |

### Capacitance

| Nom. Capacitance Conductor to Shield |                 |
|--------------------------------------|-----------------|
| 17.0 pF/ft                           |                 |
| Shielding:                           | Foil + Braid(s) |

### Inductance

Nominal Inductance

#### Impedance

Nominal Characteristic Impedance
75 Ohm

# Return Loss (RL)

| Frequency [MHz] | Minimum Return (RL) |
|-----------------|---------------------|
| 5 - 850 MHz     | 20 dB               |
| 850 - 6000 MHz  | 15 dB               |

### High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz           | 0.24 dB/100ft       |
| 3.58 MHz        | 0.45 dB/100ft       |
| 5 MHz           | 0.54 dB/100ft       |
| 6 MHz           | 0.55 dB/100ft       |
| 7 MHz           | 0.62 dB/100ft       |
| 10 MHz          | 0.72 dB/100ft       |
| 12 MHz          | 0.83 dB/100ft       |
| 25 MHz          | 1.18 dB/100ft       |
| 55 MHz          | 1.76 dB/100ft       |
| 67.5 MHz        | 1.9 dB/100ft        |
| 71.5 MHz        | 2.0 dB/100ft        |
| 88.5 MHz        | 2.2 dB/100ft        |
| 100 MHz         | 2.4 dB/100ft        |
| 135 MHz         | 2.8 dB/100ft        |
| 143 MHz         | 2.9 dB/100ft        |
| 180 MHz         | 3.3 dB/100ft        |
| 270 MHz         | 4.0 dB/100ft        |
| 360 MHz         | 4.7 dB/100ft        |
| 540 MHz         | 5.9 dB/100ft        |
| 720 MHz         | 6.9 dB/100ft        |
| 750 MHz         | 7.1 dB/100ft        |
| 1000 MHz        | 8.4 dB/100ft        |
| 1500 MHz        | 10.6 dB/100ft       |
| 2000 MHz        | 12.5 dB/100ft       |
| 2250 MHz        | 13.4 dB/100ft       |
| 3000 MHz        | 15.9 dB/100ft       |
| 4500 MHz        | 20.6 dB/100ft       |
| 6000 MHz        | 28.7 dB/100ft       |
|                 |                     |

## Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.27 ns/ft    | 80.0 %                                   |

### Voltage

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

## **Temperature Range**

| UL Temp Rating:       | 75°C           |
|-----------------------|----------------|
| Operating Temp Range: | -30°C To +75°C |

## **Mechanical Characteristics**

| Bulk Cable Weight:               | 50 lbs/1000ft |
|----------------------------------|---------------|
| Max Recommended Pulling Tension: | 90 lbs        |
| Min Bend Radius/Minor Axis:      | 2.75 in       |

## Standards

| NEC/(UL) Specification: | CM       |
|-------------------------|----------|
| RG Type:                | 6/U Type |
| RG / Series Type:       | 6/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:                                       | Yes                           |
| EU CE Mark: EU RoHS Compliance Date (yyyy-mm-dd): | Yes 2004-01-01                |
|   |                               |

### Suitability

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

## Flammability, LS0H, Toxicity Testing

| UL Flammability:   | UL 1685 - UL Loading |
|--------------------|----------------------|
| UL voltage rating: | 300 V RMS            |

#### Plenum/Non-Plenum

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

#### **Part Number**

#### Variants

| Item #         | Color         | Footnote |
|----------------|---------------|----------|
| 1694F B591000  | Black, Matte  | С        |
| 1694F B59N1000 | Black, Matte  |          |
| 1694F B59N1000 | Black, Matte  |          |
| 1694F G7X1000  | Blue, Matte   | С        |
| 1694F G7W1000  | Green, Matte  | С        |
| 1694F G8L1000  | Orange, Matte | С        |
| 1694F G7V1000  | Red, Matte    | С        |
| 1694F Z4B1000  | Violet Z4B    | С        |
| 1694F G7Y1000  | White, Matte  | С        |
| 1694F G8M1000  | Yellow, Matte | С        |

Footnote: C - CRATE REEL PUT-UP.

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