

# 1855A - 75 Ohm SDI Coax, Mini RG-59, 23 AWG Solid BC, Foil + 95% TC Braid, PVC Jkt, CMR

Item: 20119448 + 20119449



## Product Overview

### Suitable Applications

Digital Video, 6 Gb/s UHDTV, HD-SDI 1080p

## Construction Details

### RG Type

Mini 59

### CONDUCTOR

| Size   | Stranding | Nom. Diameter | Material         |
|--------|-----------|---------------|------------------|
| 23 AWG | Solid     | 0.023 in      | BC - Bare Copper |

### INSULATION

| Material                 | Nom. Insulation Diameter | Color Code |
|--------------------------|--------------------------|------------|
| PE - Polyethylene (Foam) | 0.102 in (2.59 mm)       | White      |

### OUTER SHIELD

| Layer | Outer Shield Type | Material                      | Material Trade Name | Coverage |
|-------|-------------------|-------------------------------|---------------------|----------|
| 1     | Tape              | Tri-Laminate (Alum+Poly+Alum) | Duofoil®            | 100%     |
| 2     | Braid             | Tinned Copper (TC)            |                     | 95%      |

### OUTER JACKET

| Material                 | Nom. Diameter      |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.159 in (4.04 mm) |

### Overall Cable Diameter (Nominal)

0.159 in (4.04 mm)

## Electrical Characteristics

### RETURN LOSS

| Frequency       | Min. Return Loss |
|-----------------|------------------|
| 5 - 1600 MHz    | 23 dB            |
| 1600 - 4500 MHz | 21 dB            |
| 4500 - 6000 MHz | 15 dB            |

### ATTENUATION

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz     | 0.39 dB/100ft    |
| 3.58 MHz  | 0.78 dB/100ft    |
| 5 MHz     | 0.92 dB/100ft    |
| 6 MHz     | 1.00 dB/100ft    |
| 7 MHz     | 1.08 dB/100ft    |
| 10 MHz    | 1.2 dB/100ft     |
| 12 MHz    | 1.3 dB/100ft     |
| 25 MHz    | 1.8 dB/100ft     |
| 67.5 MHz  | 2.83 dB/100ft    |
| 71.5 MHz  | 2.93 dB/100ft    |
| 88.5 MHz  | 3.22 dB/100ft    |
| 100 MHz   | 3.39 dB/100ft    |
| 135 MHz   | 3.84 dB/100ft    |
| 143 MHz   | 4.00 dB/100ft    |
| 180 MHz   | 4.41 dB/100ft    |
| 270 MHz   | 5.44 dB/100ft    |
| 360 MHz   | 6.34 dB/100ft    |
| 540 MHz   | 7.85 dB/100ft    |
| 720 MHz   | 9.15 dB/100ft    |
| 750 MHz   | 9.31 dB/100ft    |
| 1000 MHz  | 10.89 dB/100ft   |
| 1500 MHz  | 13.38 dB/100ft   |
| 2000 MHz  | 15.64 dB/100ft   |
| 2250 MHz  | 16.68 dB/100ft   |
| 3000 MHz  | 19.65 dB/100ft   |
| 4500 MHz  | 24.35 dB/100ft   |
| 6000 MHz  | 28.97 dB/100ft   |

## ELECTRICALS

| Nom. Conductor DCR | Nom. Outer Shield DCR      | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|----------------------------|---------------------------------|-------------------------------|------------------------|
| 20.1 Ohm/1000ft    | 3.7 Ohm/1000ft (12 Ohm/km) | 16.3 pF/ft (53.5 pF/m)          | 75 Ohm                        | 82%                    |

## VOLTAGE

### UL Voltage Rating

300 V (CMR, CMG)

## Mechanical Characteristics

### TEMPERATURE

| UL Temperature | Operating      |
|----------------|----------------|
| 75°C           | -30°C to +75°C |

### BEND RADIUS

#### Installation Min.

1.6 in (41 mm)

|                   |                |
|-------------------|----------------|
| Max. Pull Tension | 33 lbs (15 kg) |
| Bulk Cable Weight | 17 lbs/1000ft  |

## Standards and Compliance

|                                 |                                                                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability       | Indoor/Outdoor, Indoor, UV Resistance, Aerial - Black only, When supported by messenger wire                                    |
| Sustainability                  | CA Prop 65                                                                                                                      |
| Flammability / Reaction to Fire | UL1666 Vertical Shaft                                                                                                           |
| CPR Compliance                  | CPR Euroclass: Eca; CPR UKCA Class: Eca                                                                                         |
| NEC / UL Compliance             | CMR                                                                                                                             |
| CEC / C(UL) Compliance          | CMG                                                                                                                             |
| European Directive Compliance   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance        | UKCA Mark                                                                                                                       |
| APAC Compliance                 | China RoHS II (GB/T 26572-2011)                                                                                                 |
| Plenum Number                   | 1855P                                                                                                                           |