



**Product:** [1855A](#)

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

### Product Description

75 Ohm SDI Coax, Mini RG-59, 23 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, PVC Jacket, CMR

### Technical Specifications

#### 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 |
|--------------------------|--------------------------|
| PE - Polyethylene (Foam) | 0.102 in (2.59 mm)       |

#### 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 (RL)

| 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 (65.9 Ohm/km) | 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            |

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

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| Environmental Suitability:       | Indoor/Outdoor, Indoor, UV Resistance  |
| Sustainability:                  | CA Prop 65   |
| Flammability / Reaction to Fire: | UL1666 Vertical Shaft, FT4   |
| 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) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)  |
| Plenum Number:                   | 1855P  |

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.363 Revision Date: 12-15-2021 |
|----------------------|--|

#### Variants

| Item #         | Color       | Putup Type          | Length   | UPC          |
|----------------|-------------|---------------------|----------|--------------|
| 1855A 010500   | Black       | Reel                | 500 ft   | 612825356950 |
| 1855A 0101000  | Black       | Reel                | 1,000 ft | 612825358503 |
| 1855A 010N1000 | Black       | Reel w/Small Barrel | 1,000 ft |              |
| 1855A 010Z1000 | Black       | ReelTuff Box        | 1,000 ft | 612825434993 |
| 1855A 0105000  | Black       | Reel                | 5,000 ft | 612825436126 |
| 1855A 0061000  | Blue, Light | Reel                | 1,000 ft | 612825358459 |