



**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 | 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 (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    | 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                                                                                                                            |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.471 Revision Date: 04-24-2023 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 1855A 010500  | Black | Reel       | 500 ft   | 612825356950 |          |
| 1855A 0101000 | Black | Reel       | 1,000 ft | 612825358503 | C        |

|                |             |                     |          |              |   |
|----------------|-------------|---------------------|----------|--------------|---|
| 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 | C |
| 1855A 006N1000 | Blue, Light | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 006Z1000 | Blue, Light | ReelTuff Box        | 1,000 ft | 612825434955 |   |
| 1855A 0065000  | Blue, Light | Reel                | 5,000 ft | 612825436072 |   |
| 1855A 0011000  | Brown       | Reel                | 1,000 ft | 612825356851 | C |
| 1855A 001N1000 | Brown       | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 0015000  | Brown       | Reel                | 5,000 ft | 612825436027 |   |
| 1855A 0081000  | Gray        | Reel                | 1,000 ft | 612825358510 | C |
| 1855A 008N1000 | Gray        | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 0085000  | Gray        | Reel                | 5,000 ft | 612825436096 |   |
| 1855A N3U1000  | Green, Mil  | Reel                | 1,000 ft | 612825358480 | C |
| 1855A N3UN1000 | Green, Mil  | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A N3UZ1000 | Green, Mil  | ReelTuff Box        | 1,000 ft | 612825435006 |   |
| 1855A N3U5000  | Green, Mil  | Reel                | 5,000 ft | 612825436133 |   |
| 1855A 0031000  | Orange      | Reel                | 1,000 ft | 612825356844 | C |
| 1855A 003N1000 | Orange      | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 003Z1000 | Orange      | ReelTuff Box        | 1,000 ft | 612825434931 |   |
| 1855A 0035000  | Orange      | Reel                | 5,000 ft | 612825436041 |   |
| 1855A 0021000  | Red         | Reel                | 1,000 ft | 612825358473 | C |
| 1855A 002N1000 | Red         | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 002Z1000 | Red         | ReelTuff Box        | 1,000 ft | 612825434917 |   |
| 1855A 0025000  | Red         | Reel                | 5,000 ft | 612825436034 |   |
| 1855A 0071000  | Violet      | Reel                | 1,000 ft | 612825356837 | C |
| 1855A 007N1000 | Violet      | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 007Z1000 | Violet      | ReelTuff Box        | 1,000 ft | 612825434962 |   |
| 1855A 0075000  | Violet      | Reel                | 5,000 ft | 612825436089 |   |
| 1855A 0091000  | White       | Reel                | 1,000 ft | 612825358497 | C |
| 1855A 009N1000 | White       | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 009Z1000 | White       | ReelTuff Box        | 1,000 ft | 612825434986 |   |
| 1855A 0095000  | White       | Reel                | 5,000 ft | 612825436102 |   |
| 1855A 0041000  | Yellow      | Reel                | 1,000 ft | 612825358466 | C |
| 1855A 004N1000 | Yellow      | Reel w/Small Barrel | 1,000 ft |              |   |
| 1855A 004Z1000 | Yellow      | ReelTuff Box        | 1,000 ft | 612825434948 |   |
| 1855A 0045000  | Yellow      | Reel                | 5,000 ft | 612825436065 |   |

© 2024 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.