



Product: [4855R](#)

4K UHD Coax for 12G-SDI, 75 Ohm, Mini RG-59, 23 AWG Solid SC, Foil + 95% TC Braid, PVC Jkt, CMR

Product Description

12 GHz, 4K UHD Precision Video Cable, Mini RG-59, 75 Ohm 23 AWG solid 0.023" silver-plated copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® bonded to the core + tinned copper braid shield (95% coverage), PVC Jacket

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHDTV, 4K D-Cinema, 8K Quad-link UHDTV, HD-SDI 1080p |
|------------------------|--|

Construction Details

| | |
|----------|---------|
| RG Type: | Mini 59 |
|----------|---------|

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|----------------------|
| 23 AWG | Solid | 0.023 in | SC - Silvered Copper |

Insulation

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

Outer Shield

| Layer | Outer Shield Type | Material | Material Trade Name | Coverage |
|-------|-------------------|-------------------------------|---------------------|----------|
| 1 | Tape | Tri-Laminate (Alum+Poly+Alum) | Duobond® II | 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 - 12000 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 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 |
| 55 MHz | 2.6 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 | 9.09 dB/100ft |
| 750 MHz | 9.28 dB/100ft |
| 1000 MHz | 10.8 dB/100ft |
| 1500 MHz | 13.2 dB/100ft |
| 2000 MHz | 15.3 dB/100ft |
| 2250 MHz | 16.3 dB/100ft |
| 3000 MHz | 19.0 dB/100ft |
| 4500 MHz | 23.6 dB/100ft |
| 6000 MHz | 27.7 dB/100ft |
| 12000 MHz | 41.2 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|----------------------------|---------------------------------|-------------------------------|------------------------|
| 19.7 Ohm/1000ft | 3.8 Ohm/1000ft (12 Ohm/km) | 16.3 pF/ft (53.5 pF/m) | 75 Ohm | 82% |

Voltage

| UL Voltage Rating |
|----------------------|
| 300 V RMS (CMR, CMG) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|----------------|
| 60°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 - Riser, Indoor, 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: | 4855P |

History

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| Update and Revision: | Revision Number: 0.388 Revision Date: 04-26-2023 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|----------------|-------------|------------|-----------|--------------|----------|
| 4855R 0101000 | Black | Reel | 1,000 ft | 612825390572 | |
| 4855R 0105000 | Black | Reel | 5,000 ft | 612825390589 | C Z |
| 4855R 01010000 | Black | Reel | 10,000 ft | 612825436362 | |
| 4855R 0061000 | Blue, Light | Reel | 1,000 ft | 612825395362 | |
| 4855R 0065000 | Blue, Light | Reel | 5,000 ft | 612825436591 | |
| 4855R 00610000 | Blue, Light | Reel | 10,000 ft | 612825436218 | |
| 4855R N3U5000 | Green, Mil | Reel | 5,000 ft | 612825436652 | |
| 4855R N3U10000 | Green, Mil | Reel | 10,000 ft | 612825436447 | |
| 4855R N3U1000 | Mil Green | Reel | 1,000 ft | 612825395355 | |
| 4855R 0031000 | Orange | Reel | 1,000 ft | 612825395249 | |
| 4855R 0035000 | Orange | Reel | 5,000 ft | 612825436560 | |
| 4855R 00310000 | Orange | Reel | 10,000 ft | 612825436195 | |
| 4855R 0071000 | Purple | Reel | 1,000 ft | 612825395263 | |
| 4855R 0021000 | Red | Reel | 1,000 ft | 612825395232 | |
| 4855R 0025000 | Red | Reel | 5,000 ft | 612825436522 | |
| 4855R 00210000 | Red | Reel | 10,000 ft | 612825436164 | |
| 4855R 0075000 | Violet | Reel | 5,000 ft | 612825436607 | |
| 4855R 00710000 | Violet | Reel | 10,000 ft | 612825436225 | |
| 4855R 0095000 | White | Reel | 5,000 ft | 612825436645 | |
| 4855R 00910000 | White | Reel | 10,000 ft | 612825436461 | |
| 4855R 0041000 | Yellow | Reel | 1,000 ft | 612825395256 | |
| 4855R 0045000 | Yellow | Reel | 5,000 ft | 612825436584 | |
| 4855R 00410000 | Yellow | Reel | 10,000 ft | 612825436201 | |

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