



Product: <u>4505R</u> ☑

4K UHD Coax for 12G-SDI, 75 Ohm, RG-59, 20 AWG Solid SC, Foil + 95% TC Braid, PVC Jkt, CMR

Product Description

75 Ohm SDI Coax, RG-59, 20 AWG Solid Silvered Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, PVC Jacket, CMR

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 Dataile | |

Construction Details

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

Conductor

| AWG | Stranding | Nom. Diameter | Material |
|-----|-----------|---------------|----------------------|
| 20 | Solid | 0.032 in | SC - Silvered Copper |

Insulation

| Material | Nom. Diameter | |
|--------------------------|---------------|--|
| PE - Polyethylene (Foam) | 0.145 in | |

Outer Shield Material

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

Outer Jacket Material

| Material | Nom. Diameter | |
|--------------------------|---------------|--|
| PVC - Polyvinyl Chloride | 0.233 in | |

Electrical Characteristics

Return Loss (RL)

| Frequency [MHz] | Min. Return Loss [dB] |
|------------------|-----------------------|
| 5 - 1600 MHz | 23 dB |
| 1600 - 4500 MHz | 21 dB |
| 4500 - 12000 MHz | 15 dB |

Attenuation

| Frequency | Nom. Attenuation [dB/100ft] |
|-----------|-----------------------------|
| 1 MHz | 0.30 dB/100ft |
| 3.58 MHz | 0.60 dB/100ft |
| 5 MHz | 0.63 dB/100ft |
| 6 MHz | 0.69 dB/100ft |
| 7 MHz | 0.74 dB/100ft |
| 10 MHz | 0.90 dB/100ft |
| 12 MHz | 0.91 dB/100ft |
| 25 MHz | 1.30 dB/100ft |

| 55 MHz | 1.98 dB/100ft |
|-----------|---------------|
| 67.5 MHz | 2.05 dB/100ft |
| 71.5 MHz | 2.1 dB/100ft |
| 88.5 MHz | 2.2 dB/100ft |
| 100 MHz | 2.3 dB/100ft |
| 135 MHz | 2.7 dB/100ft |
| 143 MHz | 2.8 dB/100ft |
| 180 MHz | 3.1 dB/100ft |
| 270 MHz | 3.8 dB/100ft |
| 360 MHz | 4.4 dB/100ft |
| 540 MHz | 5.5 dB/100ft |
| 720 MHz | 6.4 dB/100ft |
| 750 MHz | 6.5 dB/100ft |
| 1000 MHz | 7.6 dB/100ft |
| 1500 MHz | 9.3 dB/100ft |
| 2000 MHz | 10.8 dB/100ft |
| 2250 MHz | 11.5 dB/100ft |
| 3000 MHz | 13.4 dB/100ft |
| 4500 MHz | 16.7 dB/100ft |
| 6000 MHz | 19.7 dB/100ft |
| 12000 MHz | 28.7 dB/100ft |
| | |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Impedence | Nom. Velocity |
|--------------------|-----------------------|---------------------------------|----------------|---------------|
| 10.1 Ohm/1000ft | 3.4 Ohm/1000ft | 16.1 pF/ft | 75 Ohm | 83% |

Voltage

UL Voltage Rating 300 V (CMR, CMG)

Mechanical Characteristics

Temperature

| UL Rating | Operating |
|------------------|----------------|
| 60°C | -20°C to +75°C |

Bend Radius



| Bulk Cable Weight: | 31 lbs/1000ft |
|--------------------|---------------|
| Max. Pull Tension: | 52 lbs |

Standards and Compliance

| Environmental Suitability: | Indoor - Riser, Indoor, UV Resistance |
|---------------------------------|--|
| Sustainability: | CA Prop 65 |
| Flammability / Fire Resistance: | 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) |
| Non-Plenum Number: | 4505P |

History

| Update and Revision: | Revision Number: 0.279 Revision Date: 05-26-2021 |
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