



Product: 4694R[□]

4K UHD Coax for 12G-SDI, 75 Ohm, RG-6, 18 AWG Solid SC, Foil + 95% TC Braid, PVC Jkt, CMR

Product Description

75 Ohm SDI Coax, RG-6, 18 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 Details | |
| RG Type: | 6 |

Conductor

| Size | Stranding | Nom. Diameter | Material |
|--------|-----------|---------------|----------------------|
| 18 AWG | Solid | 0.040 in | SC - Silvered Copper |

Insulation

| Material | Nom. Insulation Diameter |
|--------------------------|--------------------------|
| PE - Polyethylene (Foam) | 0.180 in (4.57 mm) |

Outer Shield

| 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 | Nom. Diameter |
|--------------------------|-----------------------|
| PVC - Polyvinyl Chloride | 0.274 in (6.96 mm) |
| Overall Cable Diameter | (Nominal): 0.274 in (|

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 | 0.23 dB/100ft |
| 3.58 MHz | 0.44 dB/100ft |
| 5 MHz | 0.51 dB/100ft |
| 6 MHz | 0.56 dB/100ft |
| 7 MHz | 0.59 dB/100ft |
| 10 MHz | 0.70 dB/100ft |
| 12 MHz | 0.75 dB/100ft |

| 25 MHz | 1.04 dB/100ft |
|-----------|---------------|
| 55 MHz | 1.45 dB/100ft |
| 67.5 MHz | 1.58 dB/100ft |
| 71.5 MHz | 1.62 dB/100ft |
| 88.5 MHz | 1.78 dB/100ft |
| 100 MHz | 1.89 dB/100ft |
| 135 MHz | 2.10 dB/100ft |
| 143 MHz | 2.16 dB/100ft |
| 180 MHz | 2.44 dB/100ft |
| 270 MHz | 2.97 dB/100ft |
| 360 MHz | 3.45 dB/100ft |
| 540 MHz | 4.30 dB/100ft |
| 720 MHz | 5.00 dB/100ft |
| 750 MHz | 5.10 dB/100ft |
| 1000 MHz | 5.90 dB/100ft |
| 1500 MHz | 7.30 dB/100ft |
| 2000 MHz | 8.50 dB/100ft |
| 2250 MHz | 9.10 dB/100ft |
| 3000 MHz | 10.6 dB/100ft |
| 4500 MHz | 13.2 dB/100ft |
| 6000 MHz | 15.5 dB/100ft |
| 12000 MHz | 23.0 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|----------------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 6.4 Ohm/1000ft (21 Ohm/km) | 2.8 Ohm/1000ft (9.2 Ohm/km) | 15.9 pF/ft (52.2 pF/m) | 75 Ohm | 85% |

Voltage

UL Voltage Rating 300 V (CMR, CMG)

Mechanical Characteristics

Temperature

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

Bend Radius

Installation Min. 2.75 in

| Max. Pull Tension: | 69 lbs (31 kg) |
|--------------------|----------------|
| Bulk Cable Weight: | 41 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, FT4 |
| 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: | 4694P |

History

| Update and Revision: | Revision Number: 0.301 Revision Date: 01-04-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|--------|-------|------------|--------|-----|
|--------|-------|------------|--------|-----|



| 4694R 0101000 | Black | Reel | 1,000 ft | 612825396772 |
|----------------|-------------|------|-----------|--------------|
| 4694R 0105000 | Black | Reel | 5,000 ft | 612825396826 |
| 4694R 01010000 | Black | Reel | 10,000 ft | 612825436805 |
| 4694R 0061000 | Blue, Light | Reel | 1,000 ft | 612825396758 |
| 4694R 0065000 | Blue, Light | Reel | 5,000 ft | 612825436690 |
| 4694R 00610000 | Blue, Light | Reel | 10,000 ft | 612825436768 |
| 4694R N3U1000 | Mil Green | Reel | 1,000 ft | 612825396727 |
| 4694R N3U5000 | Mil Green | Reel | 5,000 ft | 612825437604 |
| 4694R N3U10000 | Mil Green | Reel | 10,000 ft | 612825436812 |
| 4694R 0031000 | Orange | Reel | 1,000 ft | 612825396741 |
| 4694R 0035000 | Orange | Reel | 5,000 ft | 612825436676 |
| 4694R 00310000 | Orange | Reel | 10,000 ft | 612825436744 |
| 4694R 0071000 | Purple | Reel | 1,000 ft | 612825396765 |
| 4694R 0075000 | Purple | Reel | 5,000 ft | 612825436706 |
| 4694R 00710000 | Purple | Reel | 10,000 ft | 612825436775 |
| 4694R 0021000 | Red | Reel | 1,000 ft | 612825396734 |
| 4694R 0025000 | Red | Reel | 5,000 ft | 612825436669 |
| 4694R 00210000 | Red | Reel | 10,000 ft | 612825436737 |
| 4694R 0091000 | White | Reel | 1,000 ft | 612825413264 |
| 4694R 0095000 | White | Reel | 5,000 ft | 612825436713 |
| 4694R 00910000 | White | Reel | 10,000 ft | 612825436782 |
| 4694R 0041000 | Yellow | Reel | 1,000 ft | 612825408208 |
| 4694R 0045000 | Yellow | Reel | 5,000 ft | 612825436683 |
| 4694R 00410000 | Yellow | Reel | 10,000 ft | 612825436751 |

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