



Product: [1694ANH](#)

75 Ohm SDI Coax, RG-6, 18 AWG, Solid BC, Foil + 95% TC Braid, LSZH-C Jkt

Product Description

75 Ohm SDI Coax, RG-6, 18 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, LSZH Jacket, Dca. IEC 60332-3-24.

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Digital Video, 6 Gb/s UHDTV, HD-SDI 1080p; The cable is UV-resistant and suitable for indoor and outdoor use |
|------------------------|--|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | Diameter +/- Tolerance | No. of Coax |
|-----|-----------|------------------|------------------|------------------------|-------------|
| 18 | Solid | BC - Bare Copper | 1.02 mm | 0.03 mm | 1 |

| | |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

Insulation

| Type | Material | Nominal Diameter | Diameter +/- Tolerance |
|------------|--------------------------|------------------|------------------------|
| Dielectric | PE - Polyethylene (Foam) | 4.57 mm | 0.15 mm |

Outer Shield

| Type | Layer | Material | Coverage [%] | Min. Overlap | Nominal Diameter | Coverage +/- Tolerance |
|-------|-------|-------------------------------|--------------|--------------|------------------|------------------------|
| Tape | 1 | Tri-Laminate (Alum+Poly+Alum) | 100% | 2 mm | | |
| Braid | 2 | Tinned Copper (TC) | 95% | | 5.4 mm | 5% |

Outer Jacket

| Material | Nominal Diameter | Diameter +/- Tolerance |
|---|------------------|------------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 6.96 mm | 0.2 mm |

Construction and Dimensions

| | |
|------------------------------------|-------|
| Min Elongation at Break of Jacket: | 125 % |
| Min Tensile Strength of Jacket: | 9 MPa |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 21 Ohm/km | 9.2 Ohm/km |

Capacitance

| Nom. Capacitance | Capacitance Tolerance |
|------------------|-----------------------|
| 53 pF/m | 2 pF/m |

| | |
|----------------------------|---------------|
| Min Insulation Resistance: | 10000 MOhm*km |
|----------------------------|---------------|

Impedance

| Nominal Characteristic Impedance | Nominal Characteristic Tolerance |
|----------------------------------|----------------------------------|
| 75 Ohm | 3 Ohm |

Return Loss (RL)

| Frequency [MHz] | Minimum Return (RL) |
|-----------------|---------------------|
| 5 - 1600 MHz | 23 dB |
| 1600 - 4500 MHz | 21 dB |
| 4500 - 6000 MHz | 15 dB |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.8 dB/100m |
| 3.6 MHz | 1.5 dB/100m |
| 10 MHz | 2.4 dB/100m |
| 71.5 MHz | 5.6 dB/100m |
| 135 MHz | 7.4 dB/100m |
| 270 MHz | 10.4 dB/100m |
| 360 MHz | 12.1 dB/100m |
| 540 MHz | 14.8 dB/100m |
| 720 MHz | 17.5 dB/100m |
| 750 MHz | 17.9 dB/100m |
| 1000 MHz | 20.7 dB/100m |
| 1500 MHz | 25.6 dB/100m |
| 2250 MHz | 32.2 dB/100m |
| 3000 MHz | 37.7 dB/100m |
| 4500 MHz | 47.6 dB/100m |
| 6000 MHz | 58.1 dB/100m |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] | Velocity of Propagation Tolerance |
|---------------|--|-----------------------------------|
| 407 ns/ft | 82% | 2% |

Voltage

| Voltage Test Dielectric |
|-------------------------|
| 2.0 kV DC |

Temperature Range

| | |
|--------------------------|----------------|
| Installation Temp Range: | -5°C To +50°C |
| Storage Temp Range: | -30°C To +70°C |
| Operating Temp Range: | -30°C To +70°C |

Mechanical Characteristics

| | |
|---|-------|
| Max. Pull Tension: | 300 N |
| Min Bend Radius (W/o Pulling Strength): | 70 mm |

Standards

| | |
|---------------------|--------------|
| CPR Euroclass: | Dca-s1,d1,a1 |
| CENELEC Compliance: | EN 50117-1 |
| RG Type: | 6 |

Applicable Environmental and Other Programs

| | |
|----------------------|--------------------------------|
| Environmental Space: | Indoor/Outdoor - Euroclass Dca |
|----------------------|--------------------------------|

Flammability, LS0H, Toxicity Testing

| | |
|--|----------------------------------|
| IEC Flammability: | IEC 60332-1-2 and IEC 60332-3-24 |
| Other Flammability: | CEI 20-22-3 |
| LOI of Jacket: | Min. 35 % |
| IEC 60754-1 - Halogen Amount: | Zero |
| IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity: | 2.5 µS/mm |
| IEC 60754-2 - Halogen Acid Gas Amount - Min. pH: | 4.3 |
| IEC 61034-2 - Smoke Density Min. Transmittance: | 80% |

Part Number

Variants

| Item # | Color | Put-Up Type | Length | EAN |
|----------------|-----------|-------------|---------|---------------|
| 1694ANH.00305 | Black | Reel | 305 m | 8719605003591 |
| 1694ANH.00500 | Black | Reel | 500 m | 8719605003607 |
| 1694ANH.001000 | Black | Reel | 1,000 m | 8719605003577 |
| 1694ANH.001371 | Black | Reel | 1,371 m | 8719605003584 |
| 1694ANH.06100 | Blue | Reel | 100 m | 8719605003775 |
| 1694ANH.06500 | Blue | Reel | 500 m | 8719605003782 |
| 1694ANH.03100 | Cream | Reel | 100 m | 8719605003706 |
| 1694ANH.03500 | Cream | Reel | 500 m | 8719605003713 |
| 1694ANH.04100 | Gray | Reel | 100 m | 8719605003720 |
| 1694ANH.04305 | Gray | Reel | 305 m | 8719605154903 |
| 1694ANH.04500 | Gray | Reel | 500 m | 8719605003737 |
| 1694ANH.01100 | Green | Reel | 100 m | 8719605003614 |
| 1694ANH.01305 | Green | Reel | 305 m | 8719605003645 |
| 1694ANH.01500 | Green | Reel | 500 m | 8719605003669 |
| 1694ANH.011000 | Green | Reel | 1,000 m | 8719605003621 |
| 1694ANH.011219 | Green | Reel | 1,219 m | 8719605003638 |
| 1694ANH.05100 | Purple | Reel | 100 m | 8719605003744 |
| 1694ANH.05500 | Purple | Reel | 500 m | 8719605003768 |
| 1694ANH.051000 | Purple | Reel | 1,000 m | 8719605003751 |
| 1694ANH.02100 | Turquoise | Reel | 100 m | 8719605003683 |
| 1694ANH.02500 | Turquoise | Reel | 500 m | 8719605003690 |
| 1694ANH.021000 | Turquoise | Reel | 1,000 m | 8719605180216 |
| 1694ANH.07500 | Yellow | Reel | 500 m | 8719605003799 |

History

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| Update and Revision: | Revision Number: 0.214 Revision Date: 12-09-2021 |
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