



Product: [7731ELW](#)

75 Ohm SDI Coax, RG-11, 14 AWG Solid BC, Foil + 95% TC Braid, LSZH Jkt

Product Description

75 Ohm SDI Coax, RG-11, 14 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, LSZH Jacket, Cca.

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 |
|-----|-----------|------------------|------------------|------------------------|-------------|
| 14 | Solid | BC - Bare Copper | 1.63 mm | 0.03 mm | 1 |

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

Insulation

| Type | Material | Nominal Diameter | Diameter +/- Tolerance |
|------------|--------------------------|------------------|------------------------|
| Dielectric | PE - Polyethylene (Foam) | 7.11 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% | | 7.95 mm | 5% |

Outer Jacket

| Material | Nominal Diameter | Diameter +/- Tolerance |
|---|------------------|------------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 10.2 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

| Max. Conductor DCR | Max. Shield DCR |
|--------------------|-----------------|
| 8.2 Ohm/km | 4.9 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 |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.5 dB/100m |
| 10 MHz | 1.5 dB/100m |
| 71.5 MHz | 3.6 dB/100m |
| 135 MHz | 4.8 dB/100m |
| 270 MHz | 6.9 dB/100m |
| 360 MHz | 8.0 dB/100m |
| 540 MHz | 10.0 dB/100m |
| 720 MHz | 11.7 dB/100m |
| 750 MHz | 12.0 dB/100m |
| 1000 MHz | 14.1 dB/100m |
| 1500 MHz | 18.0 dB/100m |
| 2250 MHz | 22.6 dB/100m |
| 3000 MHz | 26.9 dB/100m |
| 4500 MHz | 34.1 dB/100m |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] | Velocity of Propagation Tolerance |
|---------------|--|-----------------------------------|
| 397 ns/ft | 84% | 2% |

High Frequency

| Frequency [MHz] | Min. RL (Return Loss) [dB] |
|-----------------|----------------------------|
| 5 - 850 MHz | 23 dB |
| 850 - 3000 MHz | 21 dB |

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: | 650 N |
| Min Bend Radius (W/o Pulling Strength): | 100 mm |

Standards

| | |
|---------------------|--------------|
| CPR Euroclass: | Cca-s1,d1,a1 |
| CENELEC Compliance: | EN 50117-1 |
| RG Type: | 11 |

Applicable Environmental and Other Programs

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

Flammability, LS0H, Toxicity Testing

| | |
|--|----------------------------------|
| IEC Flammability: | IEC 60332-1-2 and IEC 60332-3-24 |
| Other Flammability: | CEI 20-22-3 |
| 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: | 60% |

History

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| Update and Revision: | Revision Number: 0.19 Revision Date: 09-08-2021 |
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