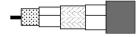


# Product: 7731DNH

Life Cycle Status: Discontinued



7731DNH - 75 Ohm SDI Coax, RG-11, 14 AWG Solid BC, Trishield, LSZH-C Jkt

# **Product Description**

75 Ohm SDI Coax, RG-11, 14 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 80% Tinned Copper Braid + Foil Shield, LSZH Jacket, Dca. IEC 60332-3-24.

# **Technical Specifications**

## **Product Overview**

| Suitable Applications: | Digital Video, 6 Gb/s UHDTV, HD-SDI 1080p; The outer conductor is designed for high screening attenuation and low transfer impedance; The cable is UV-resistant and suitable for indoor and outdoor use |
|------------------------|---|
|------------------------|---|

## **Construction Details**

## RG Type:

# Conductor

| No. of Elements | Size   | Stranding | Nom. Diameter | Material         |
|-----------------|--------|-----------|---------------|------------------|
| 1               | 14 AWG | Solid     | 1.63 mm       | BC - Bare Copper |

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#### Insulation

| Element             | Material                 | Nom. Insulation Diameter |
|---------------------|--------------------------|--------------------------|
| Insulated Conductor | PE - Polyethylene (Foam) | 7.11 mm (0.280 in)       |

## Outer Shield

| Layer | Outer Shield Type | Material                      | Coverage |
|-------|-------------------|-------------------------------|----------|
| 1     | Таре              | Tri-Laminate (Alum+Poly+Alum) | 100%     |
| 2     | Braid             | Tinned Copper (TC)            | 80%      |
| 3     | Таре              | Bi-Laminate (Alum+Poly)       | 100%     |

#### Outer Jacket

| Material  | Nom. Diamete |
|---|--------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 10.2 mm      |

## **Electrical Characteristics**

## Return Loss (RL)

| Frequency       | Min. Return Loss |
|-----------------|------------------|
| 5 - 1600 MHz    | 23 dB            |
| 1600 - 4500 MHz | 21 dB            |
| 4500 - 6000 Mhz | 15 dB            |

## Attenuation

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 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 dB/100m        |

| 540 MHz  | 10 dB/100m   |
|----------|--------------|
| 720 MHz  | 11.7 dB/100m |
| 750 MHz  | 12 dB/100m   |
| 1000 MHz | 14.1 dB/100m |
| 1500 MHz | 18 dB/100m   |
| 2250 MHz | 22.6 dB/100m |
| 3000 MHz | 26.9 dB/100m |
| 4500 MHz | 34.1 dB/100m |
| 6000 MHz | 37.8 dB/100m |

#### Electricals

| Max. Conductor DCR          | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 8.2 Ohm/km (2.5 Ohm/1000ft) | 53 pF/m (16 pF/ft)              | 75 Ohm                        | 84%                    |

#### Transfer Impedance

| Max. Transfer Impedance |
|-------------------------|
| Max. 2.5 mOhm/m         |

#### Screening

| Frequency        | Min. Screen | ing Attenuation |
|------------------|-------------|-----------------|
| 30 - 1000 MHz    | 95 dB       |                 |
| 1000 - 2000 MHz  | 85 dB       |                 |
| 2000 - 3000 MHz  | 75 dB       |                 |
| 3000 - 4500 MHz  | 65 dB       |                 |
| Screening Class: |             | A+              |

#### **Mechanical Characteristics**

#### Temperature

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

#### Bend Radius

| Stationary Min.    |                 |
|--------------------|-----------------|
| 100 mm (3.9 in)    |                 |
| Max. Pull Tension: | 650 N (150 lbf) |

## **Standards and Compliance**

| Environmental Suitability:          | Indoor/Outdoor - Euroclass Dca   |
|-------------------------------------|--|
| Flammability / Reaction to Fire:    | IEC 60332-1-2, IEC 60332-3-24, CEI 20-22-3   |
| CPR Compliance:                     | CPR Euroclass: Dca-s2,d1,a1  |
| ISO/IEC Compliance:                 | IEC 61034-2 - Smoke Density Min Transmittance = 60%  |
| CENELEC Compliance:                 | EN 50117-1   |
| European Halogen Free<br>Standards: | IEC 62821-1 Halogen Free Compliance = Yes, 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 |
| European Directive<br>Compliance:   | EU CE Mark   |
| UK Regulation Compliance:           | UKCA Mark  |

#### History

Update and Revision: Revision Number: 0.267 Revision Date: 07-29-2024

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