



Product: [4694ELW](#) 

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

Product Description

75 Ohm SDI Coax, RG-6, 18 AWG Solid Silvered Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, LSZH Jacket

Technical Specifications

Product Overview

Suitable Applications:	Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHD TV, 4K D-Cinema, 8K Quad-link UHD TV, HD-SDI 1080p
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	SC - Silvered Copper	1.0 mm	1

Conductor Count:	1
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Insulation

Type	Material	Nominal Diameter
Dielectric	PE - Polyethylene (Foam)	4.57 mm

Table Notes:	Gas Injected
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Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Outer Jacket

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.96 mm

Electrical Characteristics

Conductor DCR

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

Capacitance

Nom. Capacitance Conductor to Shield
52 pF/m

Inductance

Nominal Inductance
0.35 µH/m

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 12000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.75 dB/100m
3.58 MHz	1.44 dB/100m
5 MHz	1.67 dB/100m
6 MHz	1.84 dB/100m
7 MHz	1.94 dB/100m
10 MHz	2.3 dB/100m
12 MHz	2.5 dB/100m
25 MHz	3.4 dB/100m
55 MHz	4.8 dB/100m
67.5 MHz	5.2 dB/100m
71.5 MHz	5.3 dB/100m
88.5 MHz	5.8 dB/100m
100 MHz	6.2 dB/100m
135 MHz	6.9 dB/100m
143 MHz	7.1 dB/100m
180 MHz	8.0 dB/100m
270 MHz	9.7 dB/100m
360 MHz	11.3 dB/100m
540 MHz	14.1 dB/100m
720 MHz	16.4 dB/100m
750 MHz	16.7 dB/100m
1000 MHz	19.4 dB/100m
1500 MHz	23.9 dB/100m
2000 MHz	27.9 dB/100m
2250 MHz	29.9 dB/100m
3000 MHz	34.8 dB/100m
4500 MHz	43.3 dB/100m
6000 MHz	50.8 dB/100m
12000 MHz	75.4 dB/100m

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
4 ns/m	85%

Temperature Range

Installation Temp Rating:	-5°C To +50°C
Installation Temperature Range:	-5°C To +50°C
Operating Temperature Range:	-30°C to +75°C

Mechanical Characteristics

Bulk Cable Weight:	66 kg/km
Max. Pull Tension:	305 N
Min. Bend Radius During Installation:	70 mm
Min. Bend Radius/Minor Axis:	70 mm

Standards

CPR Euroclass:	Cca-s1a,d1,a1
RG Type:	6
Series Type:	6

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Cca
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EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
CA Prop 65:	No
MII Order #39 (China RoHS):	No

Suitability

Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	4694P

Related Part Numbers

Non-Plenum Number:	4694R
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History

Update and Revision:	Revision Number: 0.206 Revision Date: 04-08-2025
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