



**Product:** [1694ELV](#) 

75 Ohm SDI Coax, RG-6, 18 AWG, Solid BC, Foil + 95% TC Braid, LSZH 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, B2ca.

## 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:	B2ca-s1a,d1,a1
CENELEC Compliance:	EN 50117-1
RG Type:	6

Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor - Euroclass B2ca
----------------------	---------------------------------

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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%

History

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

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.