



**Product:** [1855EN3](#)

75 Ohm SDI 3 Coax, Mini RG-59, 22 AWG Solid BC, Foil + 90% TC Braid, LSZH Jkt

## Product Description

75 Ohm SDI 3 Coax, Mini RG-59, 22 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 90% Tinned Copper Braid Shield, LSZH Jacket.

## Technical Specifications

### Product Overview

Suitable Applications:	Digital Video, 6 Gb/s UHDTV, HD-SDI 1080p; Cable is UV-resistant and suitable for indoor and outdoor use
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
22	Solid	BC - Bare Copper	0.65 mm	0.02 mm	3

Conductor Count:	3
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#### Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	2.9 mm	0.15 mm

#### Color Chart

Number	Color
1	Red
2	Green
3	Blue

#### Inner Shield

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

#### Inner Jacket

Material	Nominal Diameter	Diameter +/- Tolerance
LSZH - Low Smoke Zero Halogen (Flame Retardant)	4.45 mm	0.2 mm

Table Notes:	Matte Finish
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#### Outer Jacket

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	12.1 mm

## Construction and Dimensions

### Cabling

Description	Filler
3 coax bundled around a filler covered with nonwoven foil	Filler (1x)

## Electrical Characteristics

**Conductor DCR**

Max. Conductor DCR	Max. Shield DCR
55 Ohm/km	17 Ohm/km

**Capacitance**

Nom. Capacitance Conductor to Shield
53 pF/m

**Inductance**

Nominal Inductance
0.35 $\mu$ H/m

**Impedance**

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	3 Ohm

**High Frequency (Nominal/Typical)**

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.7 dB/100m
3.6 MHz	2.5 dB/100m
5 MHz	2.8 dB/100m
6 MHz	3 dB/100m
7 MHz	3.2 dB/100m
10 MHz	3.7 dB/100m
12 MHz	4 dB/100m
25 MHz	5.4 dB/100m
67.5 MHz	8.3 dB/100m
71.5 MHz	8.6 dB/100m
88.5 MHz	9.5 dB/100m
100 MHz	10 dB/100m
135 MHz	11.5 dB/100m
143 MHz	11.9 dB/100m
180 MHz	13.2 dB/100m
270 MHz	16.1 dB/100m
360 MHz	18.6 dB/100m
540 MHz	22.8 dB/100m
720 MHz	26.4 dB/100m
750 MHz	26.9 dB/100m
1000 MHz	31.3 dB/100m
1500 MHz	38.7 dB/100m
2000 MHz	45 dB/100m
2250 MHz	48 dB/100m
2500 MHz	50.8 dB/100m
3000 MHz	56.1 dB/100m
4000 MHz	65.7 dB/100m
4500 MHz	70.2 dB/100m

**Delay**

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
400 ns/ft	84%

**High Frequency**

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB

**Screening**

Frequency [MHz]	Min. Screening Attenuation After Flexing
30 - 1000 MHz	85 dB
1000 - 2000 MHz	85 dB
2000 - 3000 MHz	85 dB
3000 - 4500 MHz	80 dB

Screening Class:	B
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#### Transfer Impedance

Frequency [MHz]	Transfer Impedance
5-30 MHz	Max. 15 mOhm/m

#### Temperature Range

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

#### Mechanical Characteristics

Min Bend Radius (W/o Pulling Strength):	120 mm
Crush Resistance:	Max. 1% (load of 700N) N

#### Standards

CPR Euroclass:	Eca
RG Type:	Mini 59

#### Applicable Environmental and Other Programs

Environmental Space:	Indoor
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#### Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 - Halogen Amount:	Zero

#### Related Part Numbers

#### Variants

Item #	Color	Put-Up Type	Length	EAN
1855EN3.00250	Black	Reel	250 m	8719605128478
1855EN3.00500	Black	Reel	500 m	8719605124722

#### History

Update and Revision:	Revision Number: 0.210 Revision Date: 02-03-2025
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