

**Product:** <u>1855EN5</u> ☑





75 Ohm SDI 5 Coax, Mini RG-59, 22 AWG Solid BC, Foil + 90% TC Braid, LSZH Jkt

# **Product Description**

75 Ohm SDI 5 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

### **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	5
Condu	ctor Count:		5		

### 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
4	White
5	Yellow

### 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
Ī	LSZH - Low Smoke Zero Halogen (Flame	Retardant)	4.45 mm	0.2 mm
	Table Notes:	Matte Finis	h	

#### **Outer Jacket**

Material	Nominal Diameter	
LSZH - Low Smoke Zero Halogen (Flame Retardant)	14.8 mm	

# **Construction and Dimensions**

#### Cabling

Description	Filler
5 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 µH/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

Screening Class:		В	
3000 - 4500 MHz	80 dB		
2000 - 3000 MHz	85 dB		

#### 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):	150 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 - Euroclass Eca	
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### Flammability, LS0H, 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
ľ	1855EN5.00250	Black	Reel	250 m	8719605004154
ľ	1855EN5.00500	Black	Reel	500 m	8719605004161

### **History**

Update and Revision:	Revision Number: 0.207 Revision Date: 02-03-2025

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