# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



# 1694SB Coax - Shipboard Precision Video Cable - Analog/Digital Application





For more Information please call

1-800-Belden1



# **Description:**

18 AWG solid .040" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® (100% coverage) plus a tinned copper braid shield (95% coverage), LSZH jacket.

### **Usage (Overall)**

Suitable Applications:

Coaxial Cable for Communication, Audio, Video, CCTV, CATV, MATV, Broadband, or Broadcast use in Marine Shipboard and Offshore use

# **Physical Characteristics (Overall)**

### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BC - Bare Copper	.040

#### Insulation

### **Insulation Material:**

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.180

### **Outer Shield**

### **Outer Shield Material:**

Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)	
	1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
	2		Braid	TC - Tinned Copper	95

### **Outer Jacket**

### **Outer Jacket Material:**

# Outer Jacket Material LSZH - Low Smoke Zero Halogen

### **Overall Cabling**

Overall Nominal Diameter: 0.274 in.

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C
Bulk Cable Weight:	42.900 lbs/1000 ft.
Max. Recommended Pulling Tension:	69 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.750 in.

# **Applicable Specifications and Agency Compliance (Overall)**

## **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMG-LS
CEC/C(UL) Specification:	CMG-LS
IEEE Specification:	Std. 45 clause 23
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes

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EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	UL444, ABS Type Approval Certificate 05-HS500072C
RG Type:	6/U
Flame Test	
UL Flame Test:	UL1685 FT4 Loading, Limited Smoke
C(UL) Flame Test:	FT4, Limited Smoke
IEC Flame Test:	60332-1, 60332-3-22 (Category A)
IEEE Flame Test:	1202
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



**Nominal Delay:** 



Nom. Conductor DC Resistance:



**Nominal Outer Shield DC Resistance:** 

DCR @ 20°C (Ohm/1000 ft) 2.8

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.240
3.580	0.440
5.000	0.520
7.000	0.610
10.000	0.710
67.500	1.650
71.500	1.690
88.500	1.860

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100.000	1.950
135.000	2.240
143.000	2.300
180.000	2.570
270.000	3.170
360.000	3.690
540.000	4.600
720.000	5.380
750.000	5.500
1000.000	6.420
1500.000	7.990
2000.000	9.370
2250.000	10.010
3000.000	11.780
4500.000	14.920

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1: Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2

using a 75 Ohm fixed bridge and termination. 75 +/- 1.5 Ohms

Other Electrical Characteristic 2: Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a

75 Ohm fixed bridge and termination.

### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	1600	23
1600	4500	21

### **Sweep Test**

Sweep Testing: 100% Sweep tested 5 MHz to 4.5 GHz.

# **Put Ups and Colors:**

	Item #	Putup	Ship Weight	Color	Notes	Item Desc
1	1694SB 0101000	1,000 FT	46.000 LB	BLACK	С	#18 PE/GIFHDPE SH FRNHPO

#### Notes:

C = CRATE REEL PUT-UP.

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