Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



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





For more Information please call

1-800-Belden1



General 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	tranding Conductor Material	
1	18	Solid	BC - Bare Copper	.040

Total Number of Conductors: 1

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		Туре	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 Cable

Overall Nominal Diameter: 0.274 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C
Bulk Cable Weight:	42 lbs/1000 ft.
Max. Recommended Pulling Tension:	69 lbs.
Min. Bend Radius/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
EU Directive 2011/65/EU (ROHS II):	Yes
IEEE Specification:	Std. 45 clause 23

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	EU CE Mark:	Yes
	EU Directive 2000/53/EC (ELV):	Yes
	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
Fla	me Test	
	UL Flame Test:	UL1685 FT4 Loading, Limited Smoke
	CSA Flame Test:	FT4
	IEC Flame Test:	60332-1, 60332-3-22 (Category A)
	IEEE Flame Test:	1202
Su	itability	
	Suitability - Indoor:	Yes
	Suitability - Outdoor:	Yes
	Sunlight Resistance:	Yes

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/ft) 0.106

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft) 16.2

Nominal Velocity of Propagation:

VP (%) 82

Nominal Delay:

Delay (ns/ft) 1.24

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 6.4

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

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67.500	1.650
71.500	1.690
88.500	1.860
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

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

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
1694SB 0101000	1,000 FT	46.000 LB	BLACK	С	#18 PE/GIFHDPE SH FRNHPO

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 6 Revision Date: 09-24-2012

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