Detailed Specifications & Technical Data

METRIC 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	Conductor Material	Dia. (mm)
1	18	Solid	BC - Bare Copper	1.016

Total Number of Conductors:	1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	4.572

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 Cable

Overall Nominal Diameter:	6.960 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C
Bulk Cable Weight:	62.504 Kg/Km
Max. Recommended Pulling Tension:	306.926 N
Min. Bend Radius/Minor Axis:	69.850 mm

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

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

Flame 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

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m)
0.347786

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
53.1522

Nominal Velocity of Propagation:

VP (%)
82

Nominal Delay:

Delay (ns/m)
4.06844

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
20.9984

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
9.1868

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.787
3.580	1.444
5.000	1.706
7.000	2.001
10.000	2.330

67.500	5.414
71.500	5.545
88.500	6.103
100.000	6.398
135.000	7.349
143.000	7.546
180.000	8.432
270.000	10.401
360.000	12.107
540.000	15.093
720.000	17.652
750.000	18.046
1000.000	21.064
1500.000	26.215
2000.000	30.743
2250.000	32.843
3000.000	38.650
4500.000	48.953

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

Notes:
C = CRATE REEL PUT-UP.

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