

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. (in.) |
|--------|-----|-----------|--------------------|------------|
| 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 | 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:

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

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

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| | |
|-----------------------------|---|
| 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/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 |
| 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 |

ENGLISH MEASUREMENT VERSION

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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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