

75 Ohm 6G SDI BNC Male to HD-BNC Male Cable
Assembly using 1694A-BL Coax, 3 FT



LCCA30798/BL-FT3

Configuration

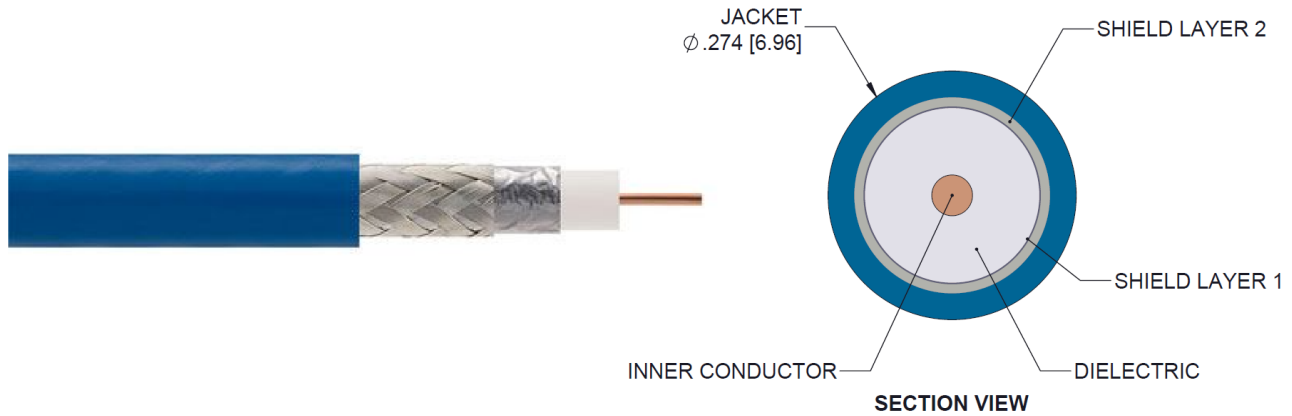
- Connector 1: BNC Male
- Connector 2: HD-BNC Male
- Cable Type: Belden 1694A-BL

Features

- Meets SMPTE ST 2081-1
- 6Gb/s Transmission
- Cost Effective

Applications

- 6G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras



Description

L-com's LCCA30798/BL-FT3 is a 75 Ohm 6G SDI BNC male to HD-BNC male cable assembly using 1694A-BL coax, 3 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com BNC to HD-BNC cable assembly has a male to male gender configuration with 75 Ohm flexible 1694A-BL series coax and operates to 6 GHz and enables 6Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2081-1. The shielding of this BNC cable is comprised of aluminum polyester.

Custom versions of this BNC male to BNC male cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA30798/BL-FT3 L-com 75 Ohm 6G SDI BNC Male to HD-BNC Male Cable Assembly using 1694A-BL Coax, 3 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------|---------|---------|---------|-------|
|-------------|---------|---------|---------|-------|

75 Ohm 6G SDI BNC Male to HD-BNC Male Cable
Assembly using 1694A-BL Coax, 3 FT



LCCA30798/BL-FT3

| | | | |
|-------------------------------|----|--------------|-----------------------|
| Frequency Range | DC | 60 | GHz |
| VSWR | | 1.5:1 | |
| Velocity of Propagation | | 82 | % |
| Group Delay | | 4.06 [13.32] | ns/ft [ns/m] |
| Capacitance | | 16.2 [53.15] | pF/ft [pF/m] |
| Inductance | | 0.347 [1.14] | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 6.4 [21] | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 3.8 [12.47] | Ohms/1000ft [Ohms/Km] |
| Operating Voltage (AC) | | 300 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 6 | GHz |
| Insertion Loss (Typ.) | 0.29 | 0.33 | 0.39 | 0.51 | 0.74 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|-------------------|
| Length | 36 in [914.4 mm] |
| Diameter | 0.5 in [12.7 mm] |
| Weight | 0.1 lbs [45.36 g] |

Cable

| | |
|--------------------------------------|--------------------|
| Cable Type | Belden 1694A-BL |
| Impedance | 75 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper, Bare |
| Dielectric Type | PE |
| Number of Shields | 1 |
| Shield Layer 1 | Aluminum Polyester |
| Shield Layer 2 | Tinned Copper |
| Jacket Material | PVC, Blue |
| Jacket Diameter | 0.274 in [6.96 mm] |

75 Ohm 6G SDI BNC Male to HD-BNC Male Cable
Assembly using 1694A-BL Coax, 3 FT



LCCA30798/BL-FT3

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------------|-----------------|-----------------|
| Type | BNC Male | HD-BNC Male |
| Impedance | 75 Ohms | 75 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 10 µin minimum | 10 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Brass, Nickel | Brass, Nickel |
| Outer Conductor Plating Specification | 50 µin minimum | 50 µin minimum |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 µin minimum | 100 µin minimum |
| Seal Gasket Material | Silicone | |

Environmental Specifications

Temperature

Operating Range -30 to +75 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

75 Ohm 6G SDI BNC Male to HD-BNC Male Cable
Assembly using 1694A-BL Coax, 3 FT

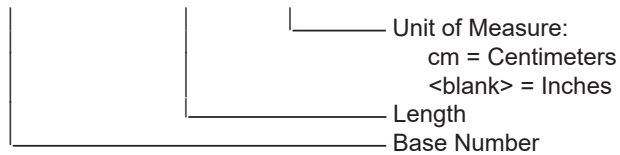


LCCA30798/BL-FT3

How to Order

Part Number Configuration:

LCCA30798/BL - xx uu



Example: LCCA30798/BL-12 = 12 inches long cable
LCCA30798/BL-100cm = 100 cm long cable

75 Ohm 6G SDI BNC Male to HD-BNC Male Cable Assembly using 1694A-BL Coax, 3 FT from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.ontained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

75 Ohm 6G SDI BNC Male to HD-BNC Male Cable Assembly using 1694A-BL Coax, 3 FT

L-com CAD Drawing

| REVISIONS | | DATE | APPROVED |
|-----------|-----------------|--------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 5/2/22 | AGANWANI |

LENGTH MEASURED FROM CONTACT TO CONTACT

| LCCA30798/ZZ (ZZ = CABLE COLOR DESIGNATION) | COAX CABLE COLOR |
|--|------------------|
| LCCA30798/BK | BLACK |
| LCCA30798/BL | BLUE |
| LCCA30798/BR | BROWN |
| LCCA30798/GR | GREEN |
| LCCA30798/GY | GRAY |
| LCCA30798/OR | ORANGE |
| LCCA30798/RD | RED |
| LCCA30798/VL | VIOLET |
| LCCA30798/WH | WHITE |
| LCCA30798/YW | YELLOW |

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

| | | | |
|---------------|--------|-----------------------------|-----------------|
| .X = ± .2 | [5.08] | FRACTIONS | ± 1/32 |
| .XX = ± .02 | [.51] | ANGLES | ± 1° |
| .XXX = ± .005 | [.13] | CABLE LENGTH (L) | TOLERANCES: |
| | | L ≤ 12 [305] | ± .1 [25] / -0 |
| | | 12 [305] < L ≤ 60 [1524] | ± .2 [51] / -0 |
| | | 60 [1524] < L ≤ 120 [3048] | ± .4 [102] / -0 |
| | | 120 [3048] < L ≤ 300 [7620] | ± .6 [152] / -0 |
| | | 300 [7620] < L = ∞ | ± .9% L / -0 |

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

L-com™

an INFINITE brand

50 High Street, West Mill, 3rd Floor, Suite #30
North Andover, MA 01845 USA.
Phone: 1.800.341.5266 | 1.978.682.6936
Fax: 1.978.689.9484
Website: www.L-com.com
E-mail: CustomerService@L-com.com

ITEM NO. LCCA30798/ZZ

SIZE A

CAGE CODE 43321

DRAWN BY HBAKKE

REV A

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

T-Rev D