

75 Ohm 6G SDI BNC Male to BNC Male Cable  
Assembly using 1694A-YW Coax, 1 FT



## LCCA30797/YW-FT1

### Configuration

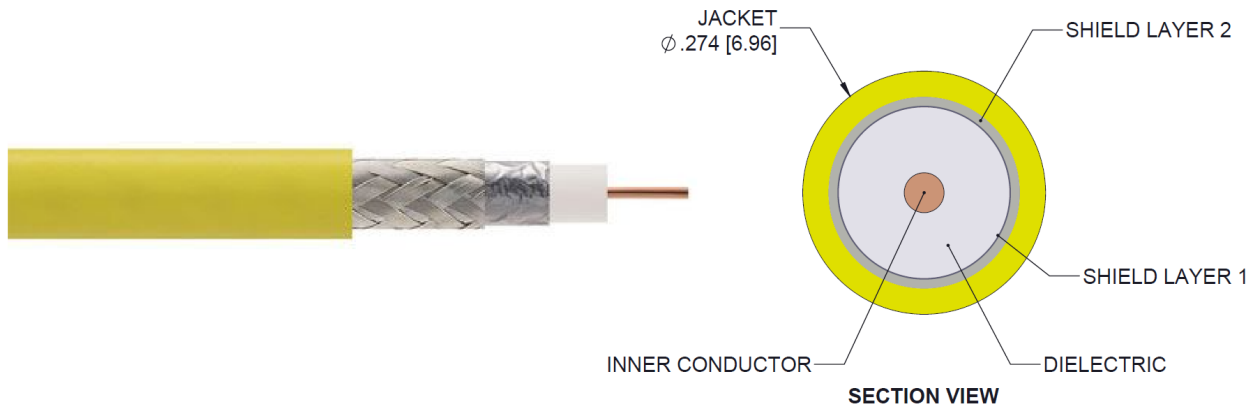
- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: Belden 1694A-YW

### 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 LCCA30797/YW-FT1 is a 75 Ohm 6G SDI BNC male to BNC male cable assembly using 1694A-YW coax, 1 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com BNC to BNC cable assembly has a male to male gender configuration with 75 Ohm flexible 1694A-YW 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 LCCA30797/YW-FT1 L-com 75 Ohm 6G SDI BNC Male to BNC Male Cable Assembly using 1694A-YW Coax, 1 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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**LCCA30797/YW-FT1**

Frequency Range	DC	6	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.)	0.23	0.25	0.27	0.31	0.38	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	12 in [304.8 mm]
Diameter	0.5 in [12.7 mm]
Weight	0.1 lbs [45.36 g]

**Cable**

Cable Type	Belden 1694A-YW
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, Yellow
Jacket Diameter	0.274 in [6.96 mm]

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### Connectors

Description	Connector 1	Connector 2
Type	BNC Male	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 -20 to +75 deg C

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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**LCCA30797/YW-FT1**

**How to Order**

Part Number Configuration:

**LCCA30797/YW - xx uu**



Example: LCCA30797/YW-12 = 12 inches long cable  
LCCA30797/YW-100cm = 100 cm long cable

75 Ohm 6G SDI BNC Male to BNC Male Cable Assembly using 1694A-YW Coax, 1 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 BNC Male Cable Assembly using 1694A-YW Coax, 1 FT

L-com CAD Drawing

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

LENGTH MEASURED FROM CONTACT TO CONTACT

LCCA30797/ZZ (ZZ = CABLE COLOR DESIGNATION)	COAX CABLE COLOR
LCCA30797/BK	BLACK
LCCA30797/BL	BLUE
LCCA30797/BR	BROWN
LCCA30797/GR	GREEN
LCCA30797/GY	GRAY
LCCA30797/OR	ORANGE
LCCA30797/RD	RED
LCCA30797/VL	VIOLET
LCCA30797/WH	WHITE
LCCA30797/YW	YELLOW

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p><b>TOLERANCES:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">.X = ±.2</td> <td style="border: none;">[5.08]</td> <td style="border: none;">FRACTIONS</td> <td style="border: none;">± 1/32</td> </tr> <tr> <td style="border: none;">.XX = ±.02</td> <td style="border: none;">[.51]</td> <td style="border: none;">ANGLES ± 1°</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">.XXX = ±.005</td> <td style="border: none;">[.13]</td> <td style="border: none;">CABLE LENGTH (L) TOLERANCES:</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;">L ≤ 12 [305]</td> <td style="border: none;">= ± 1 [25] / -0</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;">12 [305] &lt; L ≤ 60 [1524]</td> <td style="border: none;">= ± 2 [61] / -0</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;">60 [1524] &lt; L ≤ 120 [3048]</td> <td style="border: none;">= ± 4 [102] / -0</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;">120 [3048] &lt; L ≤ 300 [7620]</td> <td style="border: none;">= +6 [152] / -0</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;">300 [7620] &lt; L = +5%L / -0</td> <td style="border: none;"></td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.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 [61] / -0			60 [1524] < L ≤ 120 [3048]	= ± 4 [102] / -0			120 [3048] < L ≤ 300 [7620]	= +6 [152] / -0			300 [7620] < L = +5%L / -0		<p style="text-align: center;"><b>L-com™</b> an INFINITE brand</p> <p>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</p> <p style="text-align: center;">THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
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