

75 Ohm 6G SDI BNC Male to BNC Male Cable  
Assembly using 1694A-YW Coax, 0 FT



## LCCA30797/YW

### Configuration

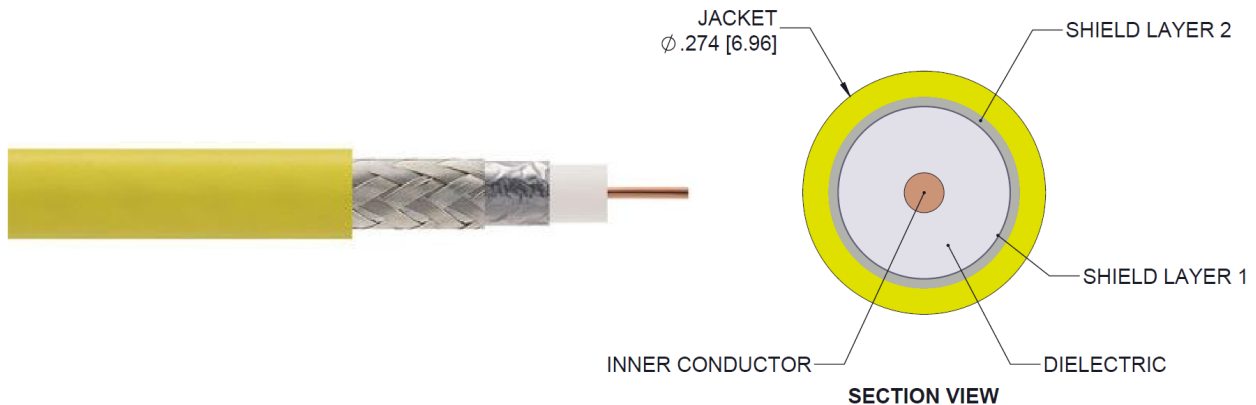
- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: Belden 1694A-YW

### 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 is a 75 Ohm 6G SDI BNC male to BNC male cable assembly using 1694A-YW coax, 0 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 L-com 75 Ohm 6G SDI BNC Male to BNC Male Cable Assembly using 1694A-YW Coax, 0 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**

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.)	0.03	0.043	0.063	0.103	0.177	dB/ft
	0.1	0.14	0.21	0.34	0.58	dB/m

**Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

**Mechanical Specifications**

**Cable Assembly**

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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## LCCA30797/YW

### 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**

**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, 0 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, 0 FT

L-com CAD Drawing

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

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

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

**TOLERANCES:**

.X = ±.2	[5.08]	FRACTIONS
.XX = ±.02	[.51]	± 1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

**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 = ∞ [914]	+/-0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**THIRD-ANGLE PROJECTION**

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SHEET 1 OF 1

SCALE N/A

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ITEM NO. LCCA30797/ZZ

SIZE A

CAGE CODE 43321

DRAWN BY HBAKKE

REV A

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