75 Ohm 6G SDI HD-BNC Male to 1.0/2.3 Male Cable Assembly using 1694A-BK Coax, 25 FT



LCCA30801/BK-FT25

Configuration

- Connector 1: HD-BNC Male
- Connector 2: 1.0/2.3 Male
- Cable Type: Belden 1694A-BK

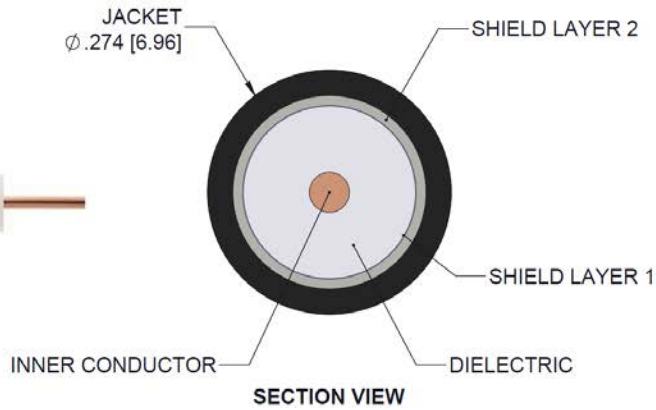
Features

- 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





SECTION VIEW

Description

L-com's LCCA30801/BK-FT25 is a 75 Ohm 6G SDI HD-BNC male to 1.0/2.3 male cable assembly using 1694A-BK coax, 25 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com HD-BNC to 1.0/2.3 cable assembly has a male to male gender configuration with 75 Ohm flexible 1694A-BK 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 HD-BNC cable is comprised of aluminum polyester.

Custom versions of this HD-BNC male to HD-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 LCCA30801/BK-FT25 L-com 75 Ohm 6G SDI HD-BNC Male to 1.0/2.3 Male Cable Assembly using 1694A-BK Coax, 25 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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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.)	0.95	1.28	1.78	2.78	4.63	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	300 in [762 cm]
Diameter	0.5 in [12.7 mm]
Weight	0.6 lbs [272.16 g]

Cable

Cable Type	Belden 1694A-BK
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, Black
Jacket Diameter	0.274 in [6.96 mm]

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Connectors

Description	Connector 1	Connector 2
Type	HD-BNC Male	1.0/2.3 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, Gold
Outer Conductor Plating Specification	50 µin minimum	3 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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LCCA30801/BK-FT25

How to Order

Part Number Configuration: **LCCA30801/BK - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- LCCA30801/BK — Base Number

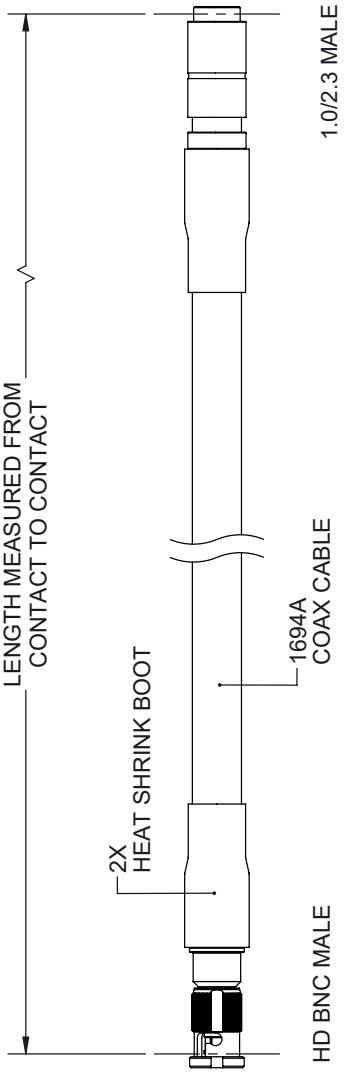
Example: LCCA30801/BK-12 = 12 inches long cable
LCCA30801/BK-100cm = 100 cm long cable

75 Ohm 6G SDI HD-BNC Male to 1.0/2.3 Male Cable Assembly using 1694A-BK Coax, 25 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.

L-com CAD Drawing

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



LCCA30801/ZZ (ZZ = CABLE COLOR DESIGNATION)	COAX CABLE COLOR
LCCA30801/BK	BLACK
LCCA30801/BL	BLUE
LCCA30801/BR	BROWN
LCCA30801/GR	GREEN
LCCA30801/GY	GRAY
LCCA30801/OR	ORANGE
LCCA30801/RD	RED
LCCA30801/VL	VIOLET
LCCA30801/WH	WHITE
LCCA30801/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 = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	43321	HBAKKE	LCCA30801/ZZ	A

SHEET 1 OF 1

SCALE N/A

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