

SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 FT



LCCA30054-FT2

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female Bulkhead
- Cable Type: RG178

Features

- Max Frequency 1 GHz
- 70% VoP
- FEP Jacket
- Heat Shrink Strain Relief

Applications

- General Purpose
- Laboratory Use



Description

L-com's LCCA30054-FT2 is a SMA male to SMA female bulkhead cable assembly using RG178 coax, 2 FT and ships same-day. The RG178 coax of this SMA cable uses the PTFE dielectric with a VoP of 70%. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com SMA to SMA cable assembly has a male to female gender configuration with flexible RG178 series coax and operates to 1 GHz. The shielding of this SMA cable is comprised of silver plated copper braid. L-com's RF cable assembly with SMA bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications.

Custom versions of this SMA male to SMA female 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 LCCA30054-FT2 L-com SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 FT



LCCA30054-FT2

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 1,000 | MHz |
| VSWR | | | 1.3:1 | |
| Velocity of Propagation | | 70 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |
| Operating Voltage (AC) | | | 250 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|-------|-------|
| Frequency | 50 | 100 | 250 | 500 | 1,000 | MHz |
| Insertion Loss (Max.) | 0.43 | 0.48 | 0.62 | 0.82 | 1.09 | dB |

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length | 24 in [609.6 mm] |
| Diameter | 0.072 in [1.83 mm] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | RG178 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 1 |
| Shield Layer 1 | Silver Plated Copper Braid |
| Jacket Material | FEP, Tan |
| Jacket Diameter | 0.072 in [1.83 mm] |
| Repeated Minimum Bend Radius | 0.4 in [10.16 mm] |

SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 FT



LCCA30054-FT2

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|------------------|------------------------|
| Type | SMA Male | SMA Female Bulkhead |
| Specification | MIL-STD-348A | |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | 50 µin minimum | |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | | Brass, Gold |
| Body Material and Plating | Brass, Nickel | Brass, Gold |
| Body Plating Specification | 100 µin minimum | |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Coupling Nut Plating Specification | 100 µin minimum | |
| Hex Size | 5/16 Inch | |
| Torque | 5 in-lbs 0.57 Nm | |
| Seal Gasket Material | | Silicone |

Environmental Specifications

Temperature

Operating Range -55 to +200 deg C

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 FT

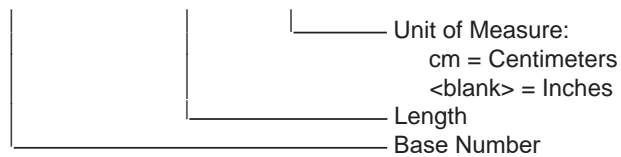


LCCA30054-FT2

How to Order

Part Number Configuration:

LCCA30054 - xx uu



Example: LCCA30054-12 = 12 inches long cable
LCCA30054-100cm = 100 cm long cable

SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 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.

SMA Male to SMA Female Bulkhead Cable Assembly using RG178 Coax, 2 FT

L-com CAD Drawing

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 01/31/2020 | SELLIS |

WWW.L-COM.COM
L-COM P/N
(SEE NOTE 1)

NOTES:

- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END, 6.0" FROM THE FRONT OF THE CONNECTOR.

| | |
|---|--|
| <p>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>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> |
| | <p>REV A</p> |
| <p>SIZE A</p> | <p>CAGE CODE DRAWN BY PART NUMBER</p> <p>43321 MVEERAPPAN LCCA30054</p> |

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 [61] / -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.

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