

SMA Male to SMA Female Cable Assembly using RG178 Coax, 4 FT



LCCA30053-FT4

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- 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 LCCA30053-FT4 is a SMA male to SMA female cable assembly using RG178 coax, 4 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.

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 LCCA30053-FT4 L-com SMA Male to SMA Female Cable Assembly using RG178 Coax, 4 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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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.)	0.66	0.76	1.04	1.43	1.98	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	48 in [121.92 cm]
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]
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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Specification	MIL-STD-348A	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	QQ-N-290
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	

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.

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LCCA30053-FT4

How to Order

Part Number Configuration:

LCCA30053 - xx uu



Example: LCCA30053-12 = 12 inches long cable
LCCA30053-100cm = 100 cm long cable

SMA Male to SMA Female Cable Assembly using RG178 Coax, 4 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 implement 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 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 implement 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 Cable Assembly using RG178 Coax, 4 FT

L-com CAD Drawing

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

LENGTH MEASURED FROM CONTACT TO CONTACT

SMA MALE

SMA FEMALE

RG178 COAX CABLE

2x HEAT SHRINK TUBE, BLACK

LABEL

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

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">.X = ± .2 [.008]</td> <td style="border: none;">FRACTIONS = ± 1/32</td> </tr> <tr> <td style="border: none;">.XX = ± .02 [.51]</td> <td style="border: none;">ANGLES = ± 1°</td> </tr> <tr> <td style="border: none;">.XXX = ± .005 [.13]</td> <td style="border: none;">CABLE LENGTH (L) TOLERANCES:</td> </tr> <tr> <td style="border: none;">12 [305] < L ≤ 60 [1524] = ± 1 [25] / -0</td> <td style="border: none;">60 [1524] < L ≤ 120 [3048] = ± 4 [102] / -0</td> </tr> <tr> <td style="border: none;">120 [3048] < L ≤ 300 [7620] = ± 6 [152] / -0</td> <td style="border: none;">300 [7620] < L = +5% / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.X = ± .2 [.008]	FRACTIONS = ± 1/32	.XX = ± .02 [.51]	ANGLES = ± 1°	.XXX = ± .005 [.13]	CABLE LENGTH (L) TOLERANCES:	12 [305] < L ≤ 60 [1524] = ± 1 [25] / -0	60 [1524] < L ≤ 120 [3048] = ± 4 [102] / -0	120 [3048] < L ≤ 300 [7620] = ± 6 [152] / -0	300 [7620] < L = +5% / -0	<p style="text-align: center;">L-comTM 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>
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<p>SIZE A</p> <p>CAGE CODE DRAWN BY 43321 MVEERAPPAN</p>	<p>PART NUMBER LCCA30053</p> <p>REV A</p>										

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.

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