

SMA Male to SMA Female Cable Using 402SS Series Coax with Heavy Duty Boot, 1.0 ft



LCCA30002-FT1

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: 402SS Series

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket
- Wire Braid over Spiral Strip Shield
- Flexible Alternative to .141 Semi-Rigid
- Heavy Duty Heat Shrink Strain Relief Boot
- Precision Stainless Steel Connectors

Applications

- General Purpose
- Laboratory Use
- Flexible RF Interconnect
- Automated (ATE) Test Systems



Description

L-com's Cable Assembly LCCA30002 is an SMA male to SMA female, 1.0 ft cable using 402SS Series coax with Heavy Duty Boot that ships same-day. L-com's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This L-com SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible 402SS Series coax and operates to 18 GHz. Highly durable stainless-steel connectors and heavy-duty booting extend the life of this versatile flexible cable assembly. The double shield includes a silver plated copper braid over a silver plated copper spiral strip providing excellent shielding effectiveness greater than 110dB.

Custom versions of this cable assembly along with the rest of L-com's RF cable assemblies can be built and shipped same day. Other available RF cable assembly value added services 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 custom cable quotes.

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 18 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 70 | | % |
| RF Shielding | 110 | | | dB |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|-------|------|-------|----|-------|
| Frequency | 3 | 5 | 10 | 18 | | GHz |
| Insertion Loss (Max.) | 0.334 | 0.435 | 0.64 | 0.895 | | 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 $0.03 \cdot \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length | 12 in [304.8 mm] |
| Diameter | 0.315 in [8 mm] |
| Weight | 0.08 lbs [36.29 g] |

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | 402SS Series |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver Plated Copper Tape |
| Shield Layer 2 | Silver Plated Copper Braid |
| Jacket Material | FEP, Tan |
| Jacket Diameter | 0.163 in [4.14 mm] |

| | |
|------------------------------|----------------|
| Repeated Minimum Bend Radius | 1 in [25.4 mm] |
|------------------------------|----------------|

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-----------------------------|-----------------------------|
| Type | SMA Male | SMA Female |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 50 µin minimum | 50 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 µin minimum | 100 µin minimum |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Specification | 100 µin minimum | 100 µin minimum |
| Hex Size | 5/16 inch | |
| Torque | 12 in-lbs [1.36 Nm] | |
| Boot Material | Heavy Duty Heat Shrink Boot | Heavy Duty Heat Shrink Boot |

Environmental Specifications

Temperature

Operating Range -55 to +165 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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LCCA30002-FT1

How to Order

Part Number Configuration:

LCCA30002 - xx uu



Example: LCCA30002-12 = 12 inches long cable
LCCA30002-100cm = 100 cm long cable

SMA Male to SMA Female Cable Using 402SS Series Coax with Heavy Duty Boot, 1.0 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.

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L-com CAD Drawing

| REVISIONS | | |
|-----------|-----------------|--------------------|
| REV. | DESCRIPTION | DATE |
| A | INITIAL RELEASE | 10/09/19 |
| | | APPROVED SELLIS |

LENGTH MEASURED FROM CONTACT TO CONTACT

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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

TOLERANCES:

| | | | |
|-------------|-------|---|-------|
| X = ±.2 | [.00] | FRACTIONS | ±.052 |
| XX = ±.02 | [.01] | ANGLES ± 1° | |
| XXX = ±.005 | [.13] | OVERALL 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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SIZE A CAGE CODE 43321 DRAWN BY DFRISIELLO PART NUMBER LCCA30002

REV A

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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T.Rw.C