

## Low Loss SMA Male to SMA Female Cable LL142 Coax

The SMA male to SMA female cable using LL142 coax, part number FMC00634, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible LL142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00634 SMA male to SMA female cable assembly operates to 18 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

| Description             | Min | Typ        | Max   | Units        |
|-------------------------|-----|------------|-------|--------------|
| Frequency Range         | DC  |            | 18    | GHz          |
| VSWR                    |     |            | 1.4:1 |              |
| Velocity of Propagation |     | 80         |       | %            |
| Capacitance             |     | 25 [82.02] |       | pF/ft [pF/m] |

### Performance by Frequency

| Description           | F1    | F2   | F3   | F4   | F5   | Units |
|-----------------------|-------|------|------|------|------|-------|
| Frequency             | 1     | 2    | 4.5  | 9    | 18   | GHz   |
| Insertion Loss (Typ.) | 0.075 | 0.1  | 0.16 | 0.23 | 0.34 | dB/ft |
|                       | 0.25  | 0.33 | 0.52 | 0.75 | 1.12 | 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

Weight 0.083 lbs [37.65 g]

#### Cable

Cable Type LL142  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper, Silver  
Dielectric Type PTFE  
Number of Shields 3  
Shield Layer 1 Silver Plated Copper Tape  
Shield Layer 2 Aluminum Polyester  
Shield Layer 3 Silver Plated Copper Wire  
Jacket Material FEP, Green  
Jacket Diameter 0.195 in [4.95 mm]



### Configuration:

- SMA Male
- SMA Female
- LL142

### Features:

- Max Frequency 18 GHz
- 80% Phase Velocity
- Triple Shielded
- FEP Jacket

### Applications:

- General Purpose
- Laboratory Use

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

Repeated Minimum Bend Radius 0.975 in [24.77 mm]

### Connectors

| Description                     | Connector 1                        | Connector 2                        |
|---------------------------------|------------------------------------|------------------------------------|
| Type                            | SMA Male                           | SMA Female                         |
| Specification                   | MIL-STD-348                        |                                    |
| Impedance                       | 50 Ohms                            | 50 Ohms                            |
| Mating Cycles                   | 500                                |                                    |
| Contact Material & Plating      | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold over Nickel |
| Contact Plating Spec.           | 50 µin minimum                     | ASTM-B488, 50µ in. minimum         |
| Dielectric Type                 | PTFE                               | PTFE                               |
| Outer Cond Material & Plating   |                                    | Passivated Stainless Steel         |
| Outer Cond Plating Spec.        |                                    | SAE-AMS-2700                       |
| Body Material & Plating         | Passivated Stainless Steel         | Passivated Stainless Steel         |
| Body Plating Spec.              | SAE-AMS-2700                       | SAE-AMS-2700                       |
| Coupling Nut Material & Plating | Passivated Stainless Steel         |                                    |
| Coupling Nut Plating Spec.      | SAE-AMS-2700                       |                                    |
| Hex Size                        | 5/16 inch                          |                                    |
| Torque                          | 7 in-lbs 0.79 Nm                   |                                    |

### Environmental Specifications

#### Temperature

Operating Range -55 to +165 deg C

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

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**FMC00634 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMC00634-12 = 12 inches long cable  
 FMC00634-100cm = 100 cm long cable

Low Loss SMA Male to SMA Female Cable LL142 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss SMA Male to SMA Female Cable LL142 Coax FMC00634](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-sma-female-cable-ll142-coax-fmc00634-p.aspx>

The information contained in 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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



