

RA SMA Male to TNC Male Cable LL142 Coax with Heat Shrink in 12 Inch

The RA SMA male to TNC male 12 inch cable using LL142 coax, part number FMC00979-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a male to male 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 FMC00979-12 SMA male to TNC male cable assembly operates to 18 GHz. The right angle SMA interface on the LL142 cable allows for easier connections in tight spaces. 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 | | | 1.5:1 | |
| 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.) | 0.55 | 0.6 | 0.69 | 0.81 | 0.98 | 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 0.42 dB per RA SMA connector and $0.05 \cdot \text{SQRT}(F\text{GHz})$ dB per TNC connector.

Mechanical Specifications

Cable Assembly

Length* 12 in [304.8 mm]
Weight 0.133 lbs [60.33 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



Configuration:

- SMA Male Right Angle
- TNC Male
- LL142

Features:

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

Applications:

- General Purpose
- Laboratory Use

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sales@fairviewmicrowave.com

Shield Layer 3 Silver Plated Copper Wire
 Jacket Material FEP, Green
 Jacket Diameter 0.195 in [4.95 mm]
 Repeated Minimum Bend Radius 0.975 in [24.77 mm]

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------|------------------------------------|------------------------------------|
| Type | SMA Male | TNC Male |
| Specification | MIL-PRF-39012 | MIL-STD-348 |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold over Nickel |
| Contact Plating Spec. | 50 µin minimum | 51 µin minimum |
| Dielectric Type | PTFE | PEI |
| Body Material & Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Plating Spec. | SAE-AMS-2700 | SAE-AMS-2701 |
| Coupling Nut Material & Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Plating Spec. | SAE-AMS-2700 | SAE-AMS-2701 |
| Hex Size | 5/16 Inch | 9/16 Inch |
| Torque | 5 in-lbs 0.57 Nm | 12 in-lbs 1.36 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:

FMC00979 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMC00979-12 = 12 inches long cable
 FMC00979-100cm = 100 cm long cable

RA SMA Male to TNC Male Cable LL142 Coax with Heat Shrink in 12 Inch 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.

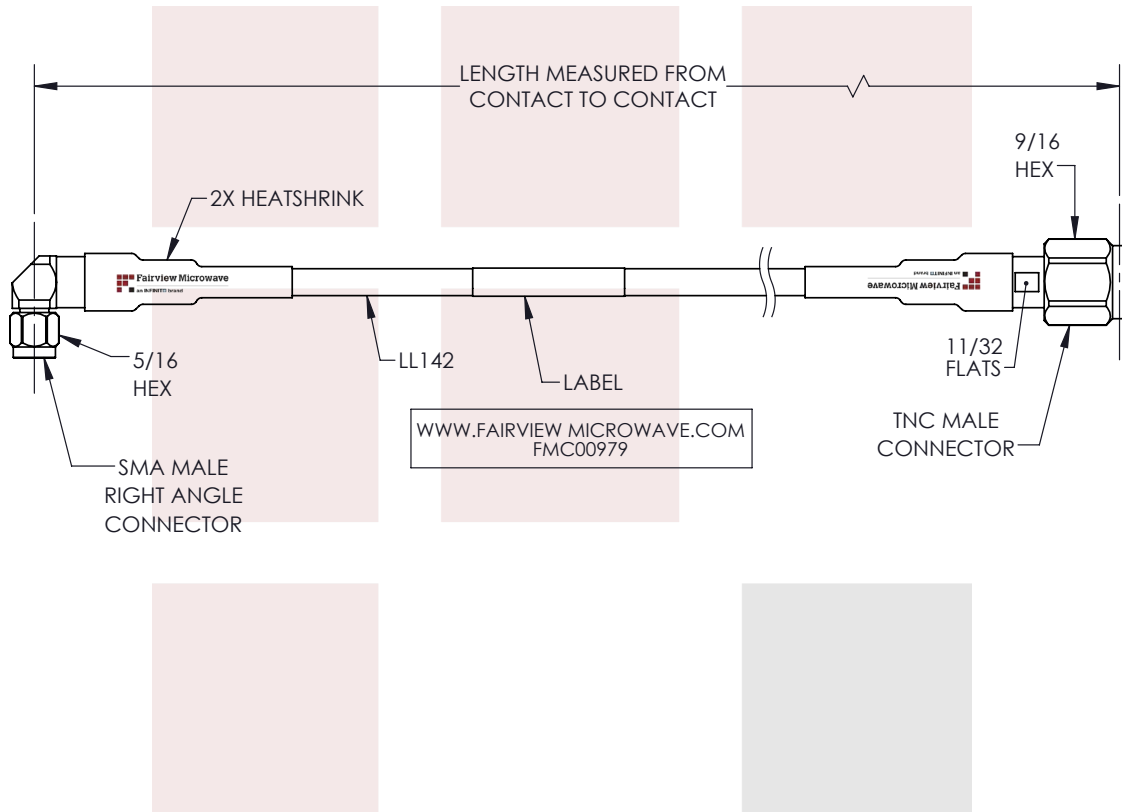
Click the following link to obtain additional part information: [RA SMA Male to TNC Male Cable LL142 Coax with Heat Shrink in 12 Inch FMC00979-12](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-tnc-male-cable-ll142-coax-fmc00979-12-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.



| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 08/10/2022 | AGANWANI |



NOTES:

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

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| <p>Fairview Microwave an INFINIT[®] brand</p> | <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES: CABLE LENGTH (L) TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [.508]</td> <td>FRACTIONS</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>± 1/32</td> <td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td>ANGLES ± 1°</td> <td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] < L = +5%L / -0</td> </tr> </table> | | .X = ±.2 [.508] | FRACTIONS | L ≤ 12 [305] = +1 [25] / -0 | .XX = ±.02 [.51] | ± 1/32 | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | .XXX = ±.005 [.13] | ANGLES ± 1° | 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 | | | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 | | | 300 [7620] < L = +5%L / -0 | <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> |
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| <p>TITLE</p> <p>RA SMA Male to TNC Male Cable LL142 Coax with Heat Shrink in 12 Inch</p> | <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> <p>SCALE N/A</p> | | | | | | | | | | | | | | | | | |
| <p>SIZE A</p> | <p>CAGE CODE 3FKR5</p> | <p>DRAWN BY BPUCHASKI</p> | <p>ITEM NO. FMC00979</p> <p>REV A</p> | | | | | | | | | | | | | | | |

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