

Low Loss SMA Male to RA TNC Male Cable LL142 Coax

The SMA male to RA TNC male cable using LL142 coax, part number FMC00638, 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 FMC00638 SMA male to TNC male cable assembly operates to 18 GHz. The right angle TNC 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.)	0.075	0.107	0.162	0.237	0.342	dB/ft
	0.25	0.35	0.53	0.78	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 for the straight connector and 0.2 dB for the right angle connector.

Mechanical Specifications

Cable Assembly

Weight 0.109 lbs [49.44 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



Configuration:

- SMA Male
- TNC Male Right Angle
- LL142

Features:

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

Applications:

- General Purpose
- Laboratory Use

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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-STD-348	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	50 µin minimum
Dielectric Type	PTFE	PTFE
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	Passivated Stainless Steel
Coupling Nut Plating Spec.	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 inch	9/16 Inch
Torque	7 in-lbs 0.79 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:

FMC00638 - xx uu

cm = Centimeters
 <blank> = Inches

Length

Example: FMC00638-12 = 12 inches long cable
 FMC00638-100cm = 100 cm long cable

Low Loss SMA Male to RA TNC Male 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.

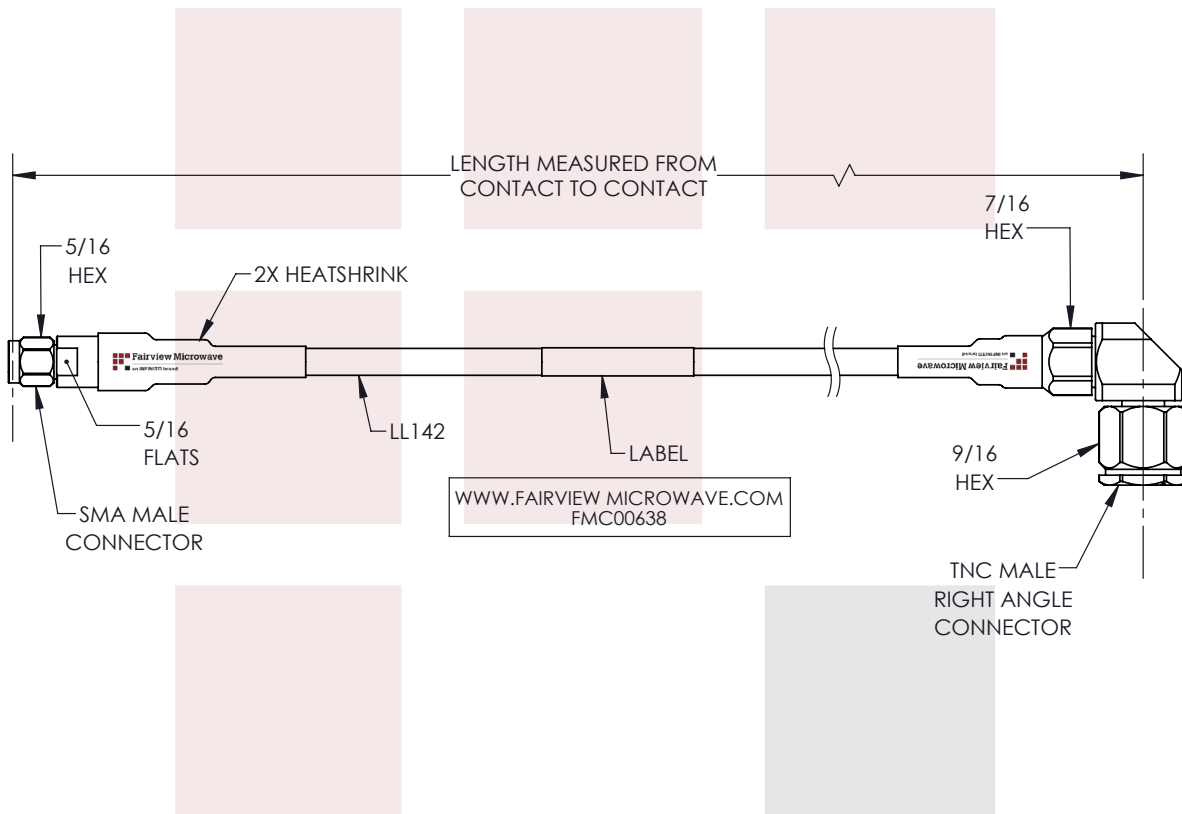
Click the following link to obtain additional part information: [Low Loss SMA Male to RA TNC Male Cable LL142 Coax FMC00638](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-ra-tnc-male-cable-ll142-coax-in-12-inch-fmc00638-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>	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		THIRD-ANGLE PROJECTION 	
	TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
TITLE Low Loss SMA Male to RA TNC Male Cable LL142 Coax	.X = ±.2 [.51] FRACTIONS .XX = ±.02 [.51] ± 1/32 .XXX = ±.005 [.13] ANGLES ± 1°	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	THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED. SHEET 1 OF 1	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.			SCALE N/A	
SIZE A	CAGE CODE 3FKR5	DRAWN BY BPUCHASKI	ITEM NO. FMC00638	REV A

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