

Low Loss RA SMA Male to TNC Male Cable RG-142 Coax

The RA SMA male to TNC male cable using RG-142 coax, part number FMC00249, 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 RG142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00249 SMA male to TNC male cable assembly operates to 8 GHz. The right angle SMA interface on the RG142 cable allows for easier connections in tight spaces. The double 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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.39 [96.42]		pF/ft [pF/m]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	4	5	GHz
Insertion Loss (Typ.)	0.08	0.12	0.18	0.27	0.32	dB/ft
	0.26	0.39	0.59	0.89	1.05	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

Cable

Cable Type	RG142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan



Configuration:

- SMA Male Right Angle
- TNC Male
- RG142

Features:

- Max Frequency 8 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

Applications:

- General Purpose
- Laboratory Use

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Jacket Diameter 0.195 in [4.95 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	MIL-STD-348A	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold	Brass, Nickel
Body Plating Spec.	3 µin minimum	QQ-N-290
Coupling Nut Material & Plating	Brass, Gold	Brass, Nickel
Coupling Nut Plating Spec.	3 µin minimum	QQ-N-290
Hex Size	5/16 inch	

Environmental Specifications

Temperature

Operating Range -55 to +200 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00249 - xx uu

cm = Centimeters
<blank> = Inches

Length

Example: FMC00249-12 = 12 inches long cable
FMC00249-100cm = 100 cm long cable

Low Loss RA SMA Male to TNC Male Cable RG-142 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

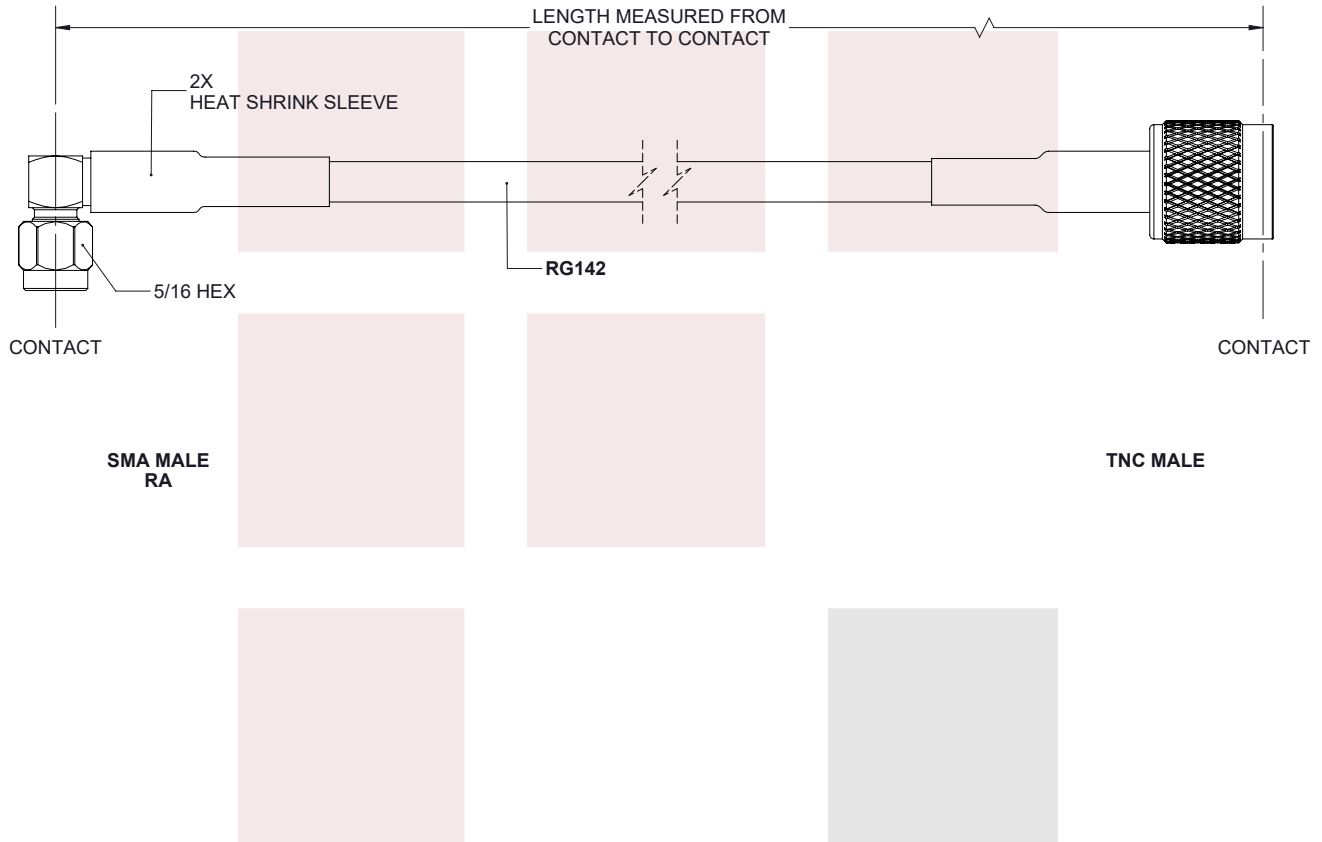
Click the following link to obtain additional part information: [Low Loss RA SMA Male to TNC Male Cable RG-142 Coax FMC00249](https://www.fairviewmicrowave.com/low-loss-ra-sma-male-tnc-male-cable-rg142-coax-fmc00249-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-tnc-male-cable-rg142-coax-fmc00249-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	2/24/2020	S.ELLIS



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TITLE
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Coax

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

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [.508]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [.13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00249	REV A
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