

Low Loss SMA Male to RA SMA Male Cable LMR-240 Coax in 50 CM

The SMA male to RA SMA male 50 cm cable using LMR-240 coax, part number FMC00472-50CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00472-50CM SMA male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-240 cable allows for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω /1000ft [Ω /Km]
Dielectric Withstanding Voltage (DC)			1,000	Vdc
Jacket Spark			5,000	Vrms
Input Power (Peak)			5.6	KWatts

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.32	0.35	0.38	0.47	0.59	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 0.15 dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Diameter	0.24 in [6.1 mm]



Configuration:

- SMA Male
- SMA Male Right Angle
- LMR-240

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

Applications:

- General Purpose
- Laboratory Use

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Weight 0.032 lbs [14.51 g]

Cable

Cable Type	LMR-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, Gold	Brass/Phosphor Bronze, Gold
Contact Plating Spec.	ASTM B488	50 µinch
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Passivated Stainless Steel, Gold	
Body Material & Plating	Passivated Stainless Steel, Gold	Brass, Tri-Metal
Body Plating Spec.	SAE-AMS-2700	80 µinch
Coupling Nut Material & Plating	Passivated Stainless Steel	Brass, Tri-Metal
Coupling Nut Plating Spec.	SAE-AMS-2700	80 µinch
Hex Size		5/16 inch
Torque		7 in-lbs 0.79 Nm
Seal Gasket Material	Silicone Rubber	Silicone

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00472 - xx uu



Example: FMC00472-12 = 12 inches long cable
FMC00472-100cm = 100 cm long cable

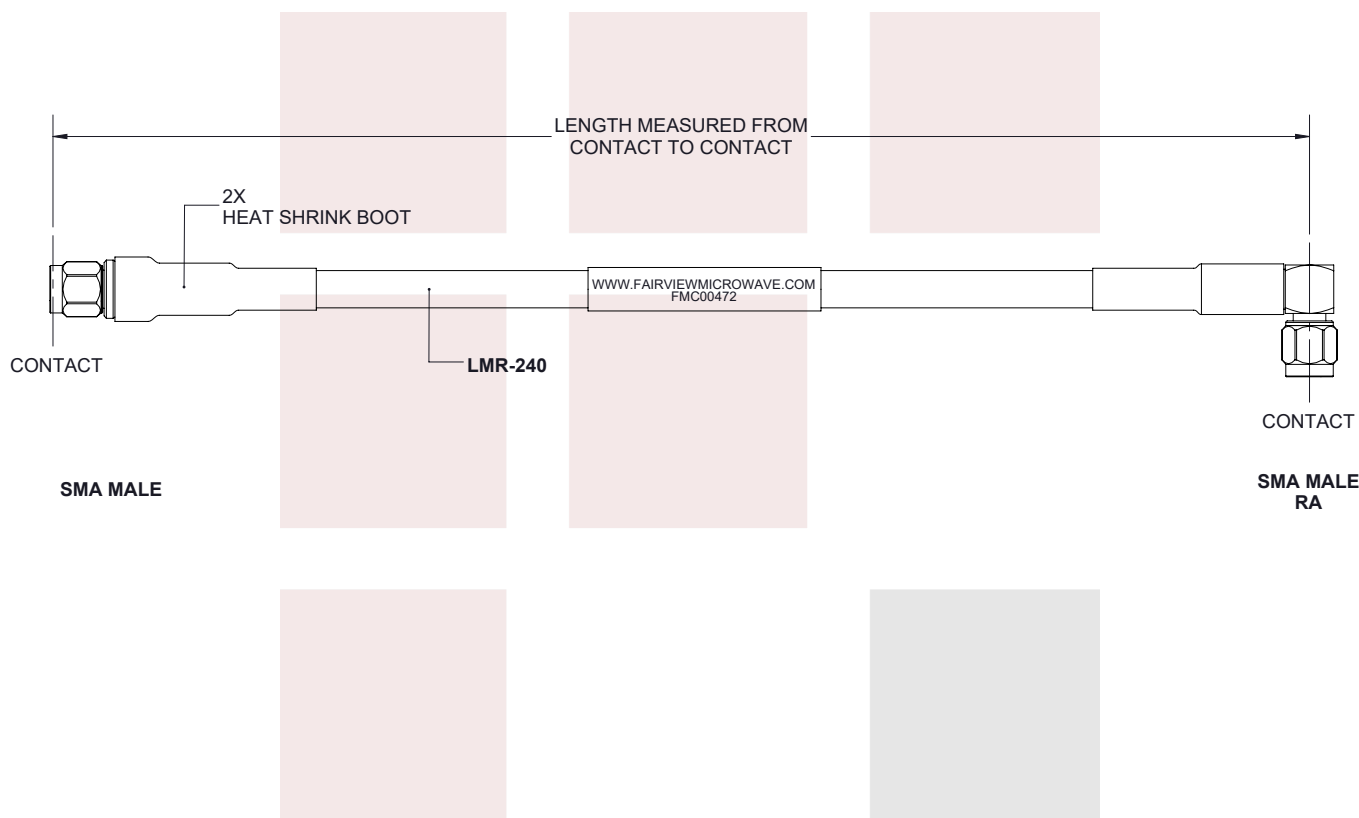
Low Loss SMA Male to RA SMA Male Cable LMR-240 Coax in 50 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss SMA Male to RA SMA Male Cable LMR-240 Coax in 50 CM FMC00472-50CM](https://www.fairviewmicrowave.com/sma-male-ra-sma-male-cable-lmr240-coax-fmc00472-50cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-male-ra-sma-male-cable-lmr240-coax-fmc00472-50cm-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	4/16/2021	S.ELLIS



NOTES:

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

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Low Loss SMA Male to RA SMA Male Cable LMR-240 Coax in 50 CM		CABLE LENGTH (L) TOLERANCES:		SHEET 1 OF 1	
SIZE A		CAGE CODE 3FKR5		SCALE N/A	
DRAWN BY K.DANG		ITEM NO. FMC00472		REV A	

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