

FMC00472-60 DATA SHEET

Low Loss SMA Male to RA SMA Male Cable LMR-240 Coax in 60 Inch

The SMA male to RA SMA male 60 inch cable using LMR-240 coax, part number FMC00472-60, 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 FMC00472-60 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	Т	ур	Max	ι	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		8	34			%	
RF Shielding	90					dB	
Group Delay		1.21	[3.97]		ns/f	t [ns/n	<u>n]</u>
Capacitance		24.2	[79.4]		pF/f	t [pF/n	n]
Inductance		0.06	[0.2]		uH/f	t [uH/r	n]
DC Resistance Inner Cor	ductor	3.2	[10.5]		Ω/100	Oft [Ω/I	(m)
DC Resistance Outer Conductor			[12.76]		Ω/100	Oft [Ω/I	(m]
Dielectric Withstanding \	/oltage (DC)			1,000		Vdc	
Jacket Spark				5,000	\	/rms	
Input Power (Peak)				5.6	K'	Watts	

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.45	0.53	0.65	0.9	1.27	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* Diameter 60 in [152.4 cm] 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)

Dielectric Type PE (F)
Number of Shields 2
Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper E
Jacket Material PE, Black

Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

Bending Moment Flat Plate Crush Tensile Strength Tinned Copper Braid PE, Black 0.24 in [6.1 mm]

0.75 in [19.05 mm] 2.5 in [63.5 mm] 0.25 lbs-ft [0.34 N-m] 20 lbs/in [0.36 Kg/mm] 80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Туре	SMA Male	SMA Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, C	Gold Brass/Phosphor Bronze, Go
Contact Plating Spec.	ASTM B488	50 μinch
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plati	ng Passivated Stainless Ste	eel, Gold
Body Material & Plating	Passivated Stainless Ste	eel, Gold Brass, Tri-Metal
Body Plating Spec.	SAE-AMS-2700	80 µinch
Coupling Nut Material & Pla	ting 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:

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How to Order

Part Number Configuration:	FMC00472	-	XX	uu	
					cm = Centimeters <blank> = Inches Length</blank>

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 60 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: Low Loss SMA Male to RA SMA Male Cable LMR-240 Coax in 60 Inch FMC00472-60

URL: https://www.fairviewmicrowave.com/sma-male-ra-sma-male-cable-Imr240-coax-fmc00472-60-p.aspx

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