

# FMC00458 DATA SHEET

# Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components

The RA SMA male to type N male cable using LMR-240 coax, part number FMC00458, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N 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 FMC00458 SMA male to type N 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	n]
Capacitance			[79.4]		pF/f	t [pF/n	n]
Inductance		0.06	[0.2]		uH/f	t [uH/r	n]
DC Resistance Inner Conductor		3.2	[10.5]		Ω/100	Oft [Ω/I	Km]
DC Resistance Outer Cor	nductor	3.89	[12.76]		Ω/100	Oft [Ω/I	Km]
Jacket Spark				5,000	١	/rms	

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.	0.039	0.055	0.079	0.129	0.204	dB/ft
	0.13	0.18	0.26	0.42	0.67	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 N connector and 0.2 dB for the SMA connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Weight 0.138 lbs [62.6 g]

Cable

Cable Type LMR-240 Impedance 50 Ohms Inner Conductor Type Solid



## **Configuration:**

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

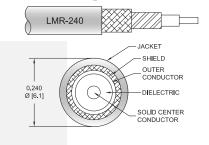
#### Features:

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

## **Applications:**

- General Purpose
- Laboratory Use

# **Cable Diagram:**



Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





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/10 [0.36 Kg/mm]

Tensile Strength 80 lbs [36.29 Kg]

#### **Connectors**

Description	Connector 1	Connector 2	
Туре	SMA Male	N Male	
Specification	MIL-STD-348		
Impedance	50 Ohms	50 Ohms	
Mating Cycles	500		
Contact Material & Plating	Brass/Phosphor Bronze	, Gold Brass, Gold	
Contact Plating Spec.	50 µinch		
Dielectric Type	Teflon	PTFE	
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Body Plating Spec.	80 µinch		
Coupling Nut Material & Pla	ating Brass, Tri-Metal	Brass, Tri-Metal	
Coupling Nut Plating Spec.	80 µinch		
Hex Size	5/16 inch	13/16 inch	
Torque	7 in-lbs 0.79 Nm	1	

## **Environmental Specifications**

Temperature

Operating Range -40 to +85 deg C

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

#### **How to Order**

Part Number Configuration: FMC00458 - xx uu | cm = Centimeters | cblank> = Inches

Example: FMC00458-12 = 12 inches long cable

FMC00458-100cm = 100 cm long cable

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- Length





Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components 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 RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components FMC00458

URL: https://www.fairviewmicrowave.com/low-loss-ra-sma-male-to-n-male-cable-lmr-240-coax-with-times-microwave-components-fmc00458-p.aspx

