

## FMC00945 DATA SHEET

# SMA Male to BNC Male Cable LMR-240 Coax with Heat Shrink

The SMA male to BNC male cable using LMR-240 coax, part number FMC00945, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to BNC 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 FMC00945 SMA male to BNC male cable assembly operates to 4 GHz. 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		Max	Units		
Frequency Range		DC			4		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			24.2	[79.4]		pF/f	t [pF/n	n]
Inductance	0.06	[0.2]		uH/f	t [uH/r	m]		
DC Resistance Inner Conductor				[10.5]		Ω/100	Oft [Ω/I	Km]
DC Resistance Outer Conductor			3.89	[12.76]		Ω/100	Oft [Ω/I	Km]
Jacket Spark					5,000	\	/rms	

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.023	0.039	0.055	0.079	0.163	dB/ft
	0.08	0.13	0.18	0.26	0.53	dB/m

### **Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per SMA connector and 0.1\*SQRT(FGHz) per BNC Connector.

## **Mechanical Specifications**

## **Cable Assembly**

Weight 0.053 lbs [24.04 g]

Cable

Cable Type LMR-240 Impedance 50 Ohms



## **Configuration:**

- SMA Male
- BNC Male
- LMR-240

## Features:

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- · Double Shielded
- PE Jacket

## **Applications:**

- General Purpose
- · Laboratory Use

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Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields

Shield Layer 1 Shield Layer 2

Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

Bending Moment

Flat Plate Crush Tensile Strength Solid Copper PE (F)

> Aluminum Tape 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	BNC Male					
Specification	MIL-STD-348						
Impedance	50 Ohms	50 Ohms					
Contact Material & Plating	Beryllium Copper, G	old Brass, Gold					
Contact Plating Spec.	ASTM B488						
Dielectric Type	PTFE	PTFE					
Outer Cond Material & Plati	ng Passivated Stainless Stee	el, Gold Brass, Tri-Metal					
Body Material & Plating	Passivated Stainless Stee	el, Gold Brass, Tri-Metal					
Body Plating Spec.	SAE-AMS-2700						
Coupling Nut Material & Plating Passivated Stainless Steel							
Coupling Nut Plating Spec. SAE-AMS-2700							

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

## **Plotted and Other Data**

Notes:

#### **How to Order**

Part Number Configuration:

FMC00945 - xx cm = Centimeters <black> = Inches Length

Example: FMC00945-12 = 12 inches long cable

FMC00945-100cm = 100 cm long cable





SMA Male to BNC Male Cable LMR-240 Coax with Heat Shrink 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: SMA Male to BNC Male Cable LMR-240 Coax with Heat Shrink FMC00945

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

URL: https://www.fairviewmicrowave.com/sma-male-bnc-male-cable-lmr240-coax-fmc00945-p.aspx

to implem	ent improve	ements. Fairvie	w Microw	ave reserv	es the righ	nt to mal	ke such	changes	as req	uired. Ur	less of	therwise
		ns are nominal										
		described herei			r purpose,	and Fai	rview N	1icrowave	does	not assun	ne any	liability
arising ou	t of the use	of any part or c	ocumen	tation.								





