



# Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 Coax

The BMA plug slide-on bulkhead to SMA male cable using LMR-100 coax, part number FMCA1640, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-100A-PVC coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1640 BMA plug to SMA male cable assembly operates to 5.8 GHz. Our RF cable assembly with BMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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		
Return Loss				15.56		dB
Velocity of Propagation		ć	66			%
RF Shielding	90					dB
Group Delay		1.54	[5.05]		ns/f	t [ns/m]
Capacitance		30.8 [	101.05	5]	pF/f	t [pF/m]
Inductance		0.077	[0.25]	]	uH/f	t [uH/m]
DC Resistance Inner Cor	nductor	81 [2	65.75]		Ω/100	0ft [Ω/Km]
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/100	0ft [Ω/Km]
Jacket Spark				2,000	\	/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.)	0.12	0.17	0.24	0.24 0.4 0.64		dB/ft
	0.39	0.56	0.79	1.31	2.1	dB/m

#### **Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.1\ dB$  per connector.

#### **Mechanical Specifications**

**Cable Assembly** 

Diameter

0.315 in [8 mm]







# **Configuration:**

- Slide-On BMA Plug Bulkhead
- SMA Male
- LMR-100A-PVC

#### **Features:**

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

# **Applications:**

- General Purpose
- · Laboratory Use
- Rack and Panel
- BMA Cable RF Backplanes
- Phased Array Interconnects
- High Speed Switching Networks
- Blind Mate BMA Test

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Cable

Cable Type **Impedance** 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

LMR-100A-PVC 50 Ohms Solid

Copper Clad Steel

PΕ 2

> Aluminum Tape Tinned Copper Braid

PVC, Black

0.11 in [2.79 mm]

15 lbs [6.8 Kg]

0.25 in [6.35 mm] 1 in [25.4 mm] 0.1 lbs-ft [0.14 N-m] 10 lbs/in [0.18 Kg/mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	BMA Plug	SMA Male
Mount Method	Bulkhead	
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Slide-On	
Contact Material & Plating	Beryllium Copper, Go	old Brass, Gold
Contact Plating Spec.	51.18µ in. minimun	n MIL-G-45204
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plati	ng Passivated Stainless S	teel
Body Material & Plating	Passivated Stainless St	teel Passivated Stainless Steel
Hex Size	8 mm	5/16 inch

#### Mechanical Specification Notes:

# **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C

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

**Plotted and Other Data** 

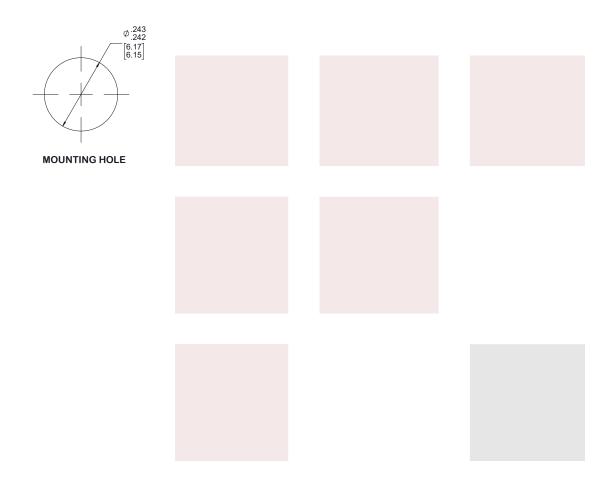
Notes:

<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or  $\pm$  3/8", whichever is greater.





## **Typical Performance Data**



## **How to Order**

Example: FMCA1640-12 = 12 inches long cable

FMCA1640-100cm = 100 cm long cable





Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 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: Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 Coax FMCA1640

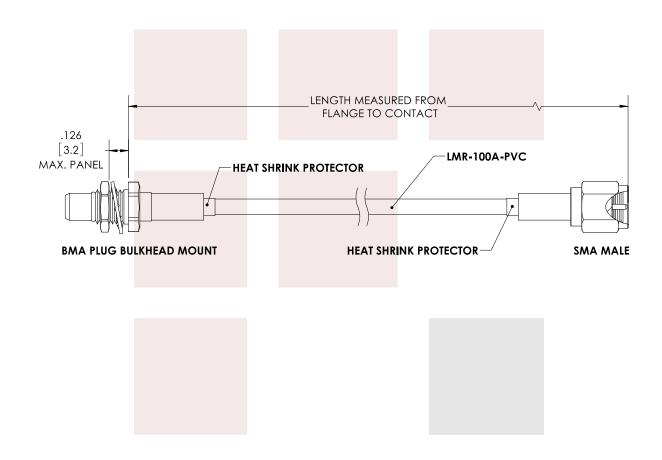
The information contained in this document is accurate to the best of our knowledge and representative of the part

URL: https://www.fairviewmicrowave.com/bma-plug-sma-male-cable-lmr100-coax-fmca1640-p.aspx

described I	herein. It r	nay be i	necessar	y to ma	ke modifica	itions to th	e part a	nd/or tl	ne docum	entation o	f the part	, in order
to impleme	ent improve	ments.	Fairview	Microw	ave reserve	es the right	to mak	e such d	changes a	s required	. Unless	otherwise
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arising out	of the use	of any p	art or do	ocument	tation.							







STANDARD TOLERANCES
.X ±0.2

XX ±0.01 XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC.  ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm].						
Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-	DWG NO FMCA1640			CAGE CODE 3FKR5			
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