

# FMCA1638 DATA SHEET

# Slide-On BMA Plug Bulkhead to Snap-On BMA Jack Cable LMR-100 Coax

The BMA plug slide-on bulkhead to BMA jack snap-on cable using LMR-100 coax, part number FMCA1638, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to BMA cable assembly has a plug to jack 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 FMCA1638 BMA plug to BMA jack 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**

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Description	Min	Т	ур	Max	ι	Inits
Frequency Range	DC			5.8		GHz
VSWR				1.4:1		
Return Loss				15.56		dB
Velocity of Propagation		e	6			%
RF Shielding	90					dB
Group Delay		1.54	[5.05]		ns/f	t [ns/m]
Capacitance	30.8 [101.05]		5]	pF/ft [pF/m]		
Inductance		0.077	[0.25	]	uH/f	t [uH/m]
DC Resistance Inner Cor	ductor	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	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.)	0.12	0.17	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

0.35 in [8.89 mm]



# **Configuration:**

- Slide-On BMA Plug Bulkhead
- Snap-On BMA Jack
- 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

LMR-100A-PVC 50 Ohms Solid Copper Clad Steel PE 2 Aluminum Tape Tinned Copper Braid PVC, Black 0.11 in [2.79 mm]

One Time Minimum Bend Radius0.25 in [6.35 mm]Repeated Minimum Bend Radius1 in [25.4 mm]Bending Moment0.1 lbs-ft [0.14 N-m]Flat Plate Crush10 lbs/in [0.18 Kg/mm]Tensile Strength15 lbs [6.8 Kg]

#### Connectors

Description	Connector 1	Connector 2
Туре	BMA Plug	BMA Jack
Mount Method	Bulkhead	
Impedance	50 Ohms	50 Ohms
Connection Method	Slide-On	Snap-On
Contact Material & Plating	Beryllium Copper, G	old Beryllium Copper, Gold
Contact Plating Spec.	51.18µ in. minimu	m 51.18µ in. minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plati	ng Passivated Stainless S	Steel Beryllium Copper, Gold
Body Material & Plating	Passivated Stainless S	Steel Passivated Stainless Steel
Hex Size	8 mm	

Mechanical Specification Notes:

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

### **Environmental Specifications**

**Temperature** Operating Range

-40 to +85 deg C

Compliance Certifications (see product page for current document)

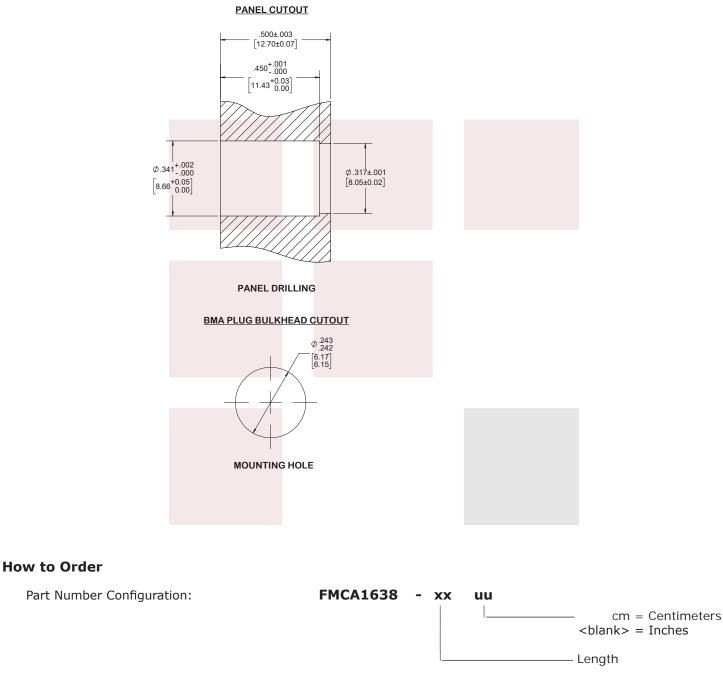
### **Plotted and Other Data**

Notes:





#### **Typical Performance Data**



Example: FMCA1638-12 = 12 inches long cable FMCA1638-100cm = 100 cm long cable





Slide-On BMA Plug Bulkhead to Snap-On BMA Jack 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 Snap-On BMA Jack Cable LMR-100 Coax FMCA1638

URL: https://www.fairviewmicrowave.com/bma-plug-bma-jack-cable-Imr100-coax-fmca1638-p.aspx

