

# FMCA1641-12 DATA SHEET

# Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax in 12 Inch

The BMA jack snap-on to RA SMA male 12 inch cable using LMR-100 coax, part number FMCA1641-12, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to SMA cable assembly has a jack 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 FMCA1641-12 BMA jack to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-100A-PVC 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	Inits
Frequency Range	DC			5.8		GHz
VSWR			1.4:1			
Return Loss			15.56		dB	
Velocity of Propagation		(	66			%
RF Shielding	90					dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]		
Capacitance		30.8 [101.05]		pF/ft [pF/m]		
Inductance		0.077 [0.25]		uH/ft [uH/m]		
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]		
DC Resistance Outer Cor	nductor	9.5 [31.17]		Ω/1000ft [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.)	0.32	0.37	0.44	0.6	0.84	dB

# **Mechanical Specifications**

Cable Assembly Length\* Diameter

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating 12 in [304.8 mm] 0.35 in [8.89 mm]

LMR-100A-PVC 50 Ohms Solid Copper Clad Steel



# **Configuration:**

- Snap-On BMA Jack
- SMA Male Right Angle
- 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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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 2 Aluminum Tape Tinned Copper Braid PVC, Black 0.11 in [2.79 mm]

ΡE

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] 15 lbs [6.8 Kg]

#### Connectors

Description	Connect	or 1	Connector	2	
Туре	BMA Ja	ck	SMA Male	è	
Specification			MIL-STD-34	-8A	
Impedance	50 Ohr	ns	50 Ohms		
Connection Method	Snap-C	Dn			
Contact Material & Plating	Beryllium Cop	per, Golc	Brass, Gold	b	
Contact Plating Spec.	51.18µ in. m	51.18µ in. minimum		50 µin minimum	
Dielectric Type	PTFE		PTFE		
Outer Cond Material & Plati	ing Beryllium Cop	per, G <mark>olc</mark>	1		
Body Material & Plating	Passivated Stair	nless <mark>Ste</mark>	el Brass, Nicke	el	
Body Plating Spec.			100 µin minim	num	
Coupling Nut Material & Pla	ating		Brass, Nicke	el	
Coupling Nut Plating Spec.			100 µin minim	num	
Hex Size			5/16 inch	1	
Torque			3 in-lbs [0.34	Nm]	

#### 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)

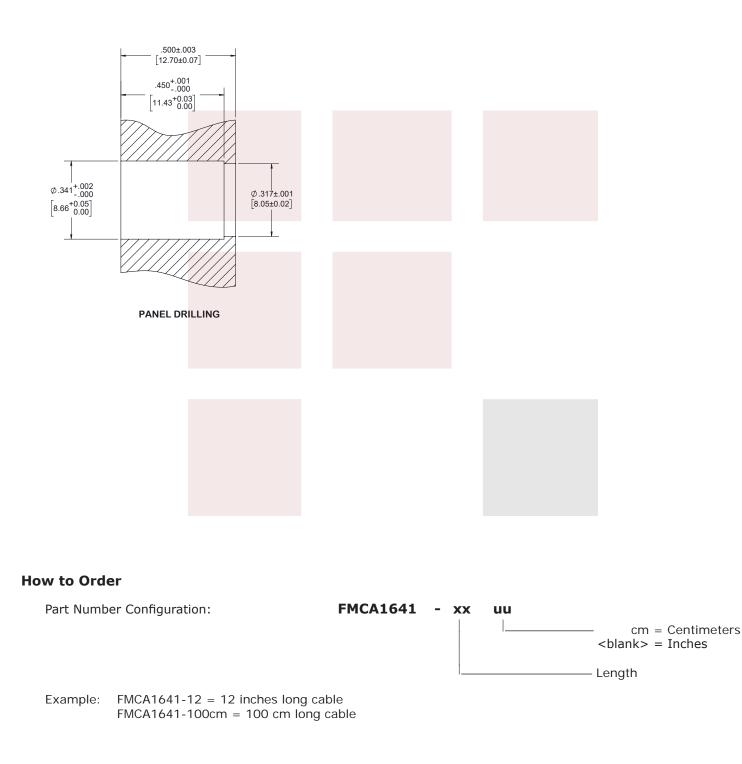
# **Plotted and Other Data**

Notes:





# **Typical Performance Data**



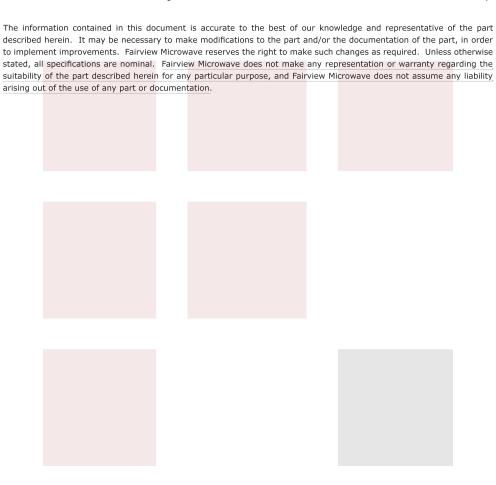




Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax in 12 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

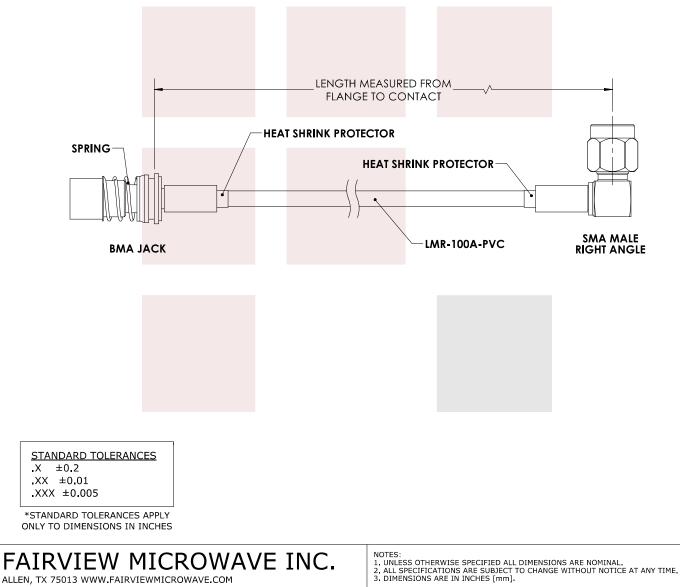
Click the following link to obtain additional part information: Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax in 12 Inch FMCA1641-12

URL: https://www.fairviewmicrowave.com/bma-jack-ra-sma-male-cable-Imr100-coax-fmca1641-12-p.aspx









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dwg no FMCA1641			CAGE CODE 3FKR5		
CAD FILE 12/28/2017	SHEET	SCAL	.E N/A	SIZE A	CN2245