

# FMCA1641-24 **DATA SHEET**

## Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax in 24 Inch

The BMA jack snap-on to RA SMA male 24 inch cable using LMR-100 coax, part number FMCA1641-24, 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 FMCA1641-24 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		ć	66			%	_
RF Shielding	90					dB	_
Group Delay		1.54 [5.05]			ns/ft [ns/m]		
Capacitance		30.8 [	101.05	]	pF/f	t [pF/m]	Γ
Inductance		0.077	[0.25]		uH/f	t [uH/m]	]
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]			
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/100	Oft [Ω/Kr	<u>m]</u>
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.)	0.44	0.54	0.68	1	1.48	dB

### **Mechanical Specifications**

### **Cable Assembly**

Lenath\* 24 in [609.6 mm] 0.35 in [8.89 mm] Diameter

#### Cable

LMR-100A-PVC Cable Type **Impedance** 50 Ohms Inner Conductor Type Inner Conductor Material and Plating

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

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

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





Dielectric Type PE Number of Shields 2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PVC, Black
Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

Bending Moment

Flat Plate Crush

Tensile Strength

O.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	Connect	or 1	Connector 2				
Туре	BMA Ja	ck	SMA Male				
Specification			MIL-STD-348A				
Impedance	50 Ohr	ns	50 Ohms				
Connection Method	Snap-On						
Contact Material & Plating	Beryllium Cop	Copper, Gold Brass, Gol			ld		
Contact Plating Spec.	51.18µ in. m	inimu	ım 50 µin minimum				
Dielectric Type	PTFE		PTFE				
Outer Cond Material & Plating Beryllium Copper, Gold							
Body Material & Plating	Passivated Stai	nless S	Steel	el Brass, Nickel			
Body Plating Spec.				100 µin minimum			
Coupling Nut Material & Pla	ating Brass, Nic		kel				
Coupling Nut Plating Spec.	:. 100 µin minimu			mum			
Hex Size	lex Size 5/16 inch			h			
Torque		3 in-lbs [0.34 Nm]			4 Nm]		

#### 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**

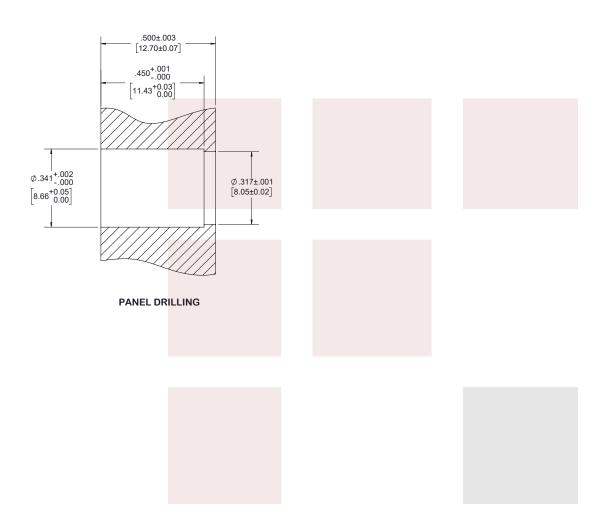
Notes:

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

<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**

Part Number Configuration: FMCA1641 - xx uu

cm = Centimeters
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Example: FMCA1641-12 = 12 inches long cable

FMCA1641-100cm = 100 cm long cable





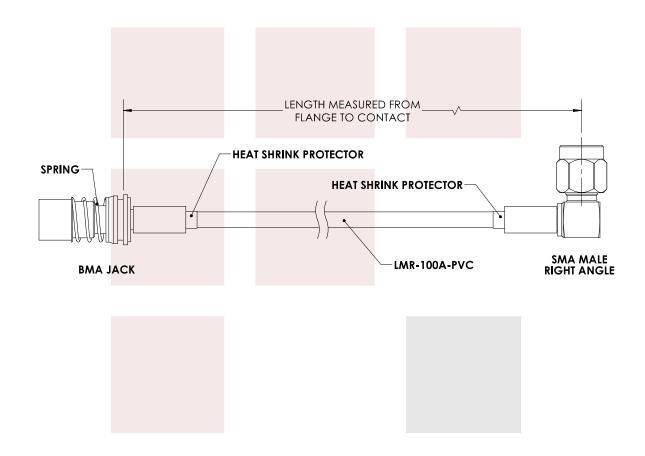
Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax in 24 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax in 24 Inch FMCA1641-24

URL: https://www.fairviewmicrowave.com/bma-jack-ra-sma-male-cable-Imr100-coax-fmca1641-24-p.aspx







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].					
Snap-On BMA Jack to RA SMA Male Cable LMR-100	DWG NO FMCA1641			CAGE CODE 3FKR5		
COUNTIL 24 THOR	CAD FILE 12/28/2017	SHEET	SCAL	LE N/A SIZE A	CN2245	