

Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax

The BMA jack snap-on to RA SMA male cable using LMR-100 coax, part number FMCA1641, 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 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	Typ	Max	Units
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]		$\Omega/1000ft$ [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		$\Omega/1000ft$ [Ω/Km]
Jacket Spark			2,000	Vrms

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]

Cable

Cable Type LMR-100A-PVC



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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Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel
 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 0.25 in [6.35 mm]
 Repeated Minimum Bend Radius 1 in [25.4 mm]
 Bending Moment 0.1 lbs-ft [0.14 N-m]
 Flat Plate Crush 10 lbs/in [0.18 Kg/mm]
 Tensile Strength 15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	BMA Jack	SMA Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Snap-On	
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.	51.18µ in. minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Beryllium Copper, Gold	
Body Material & Plating	Passivated Stainless Steel	Brass, Nickel
Body Plating Spec.		100 µin minimum
Coupling Nut Material & Plating		Brass, Nickel
Coupling Nut Plating Spec.		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs [0.34 Nm]

Mechanical Specification Notes:

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

Environmental Specifications

Temperature

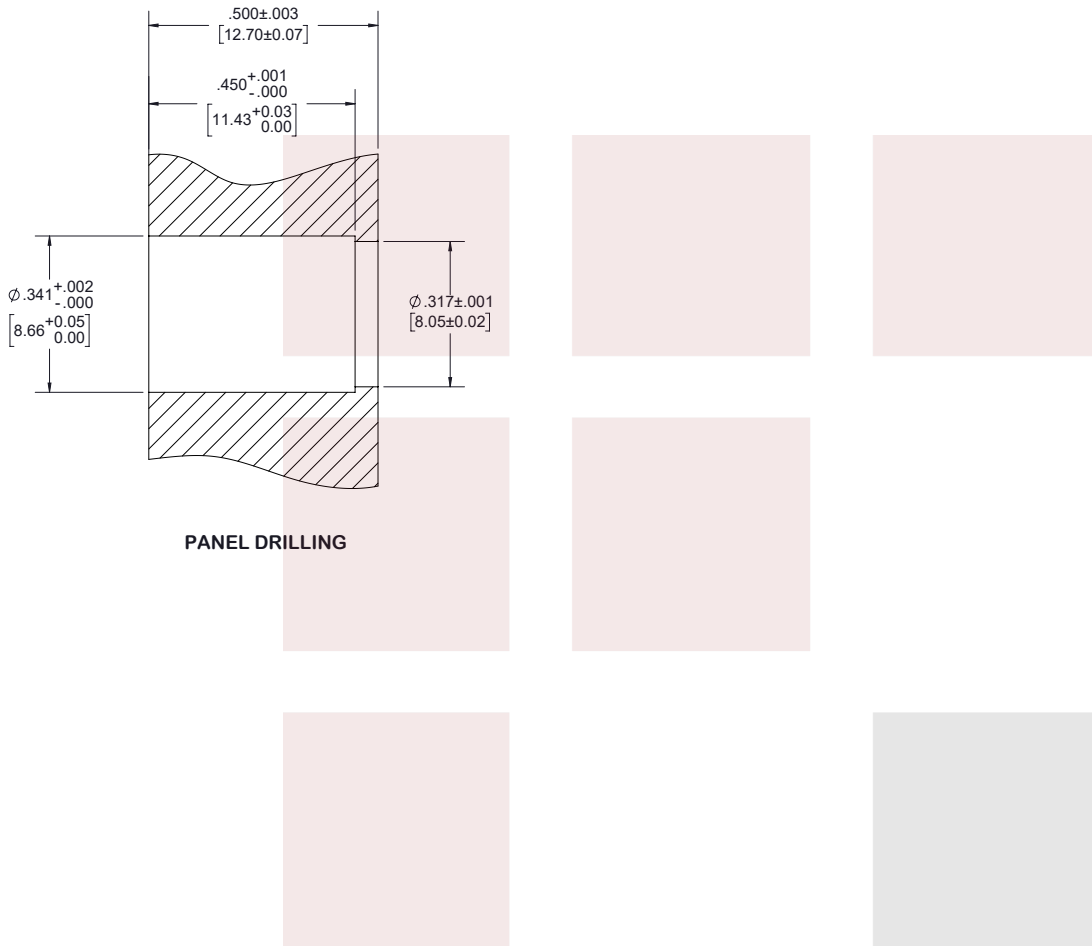
Operating Range -40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

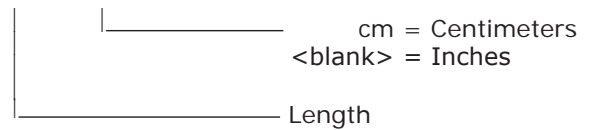
Typical Performance Data



How to Order

Part Number Configuration:

FMCA1641 - xx uu



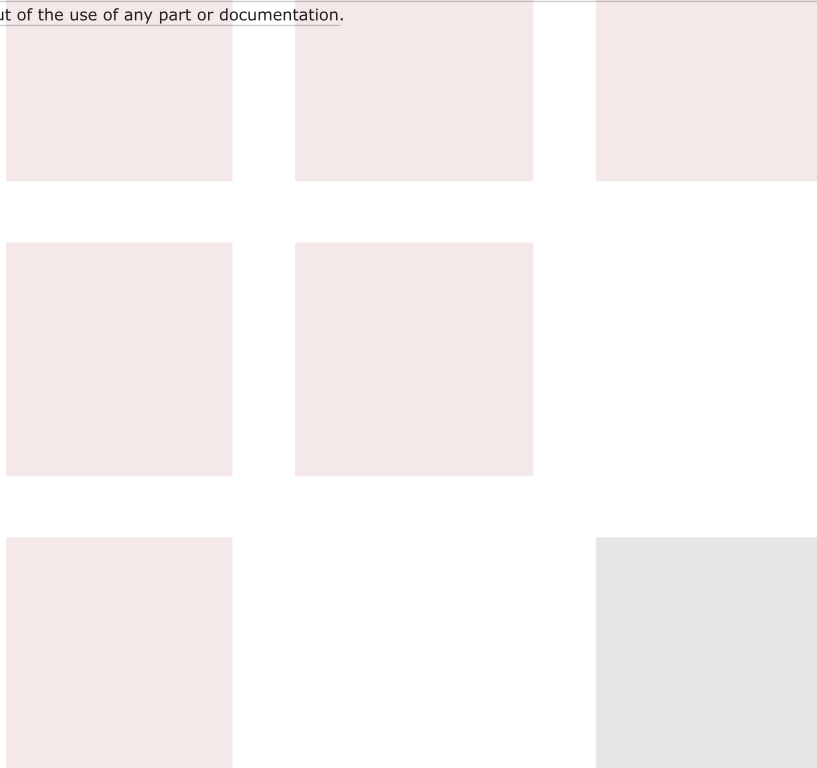
Example: FMCA1641-12 = 12 inches long cable
 FMCA1641-100cm = 100 cm long cable

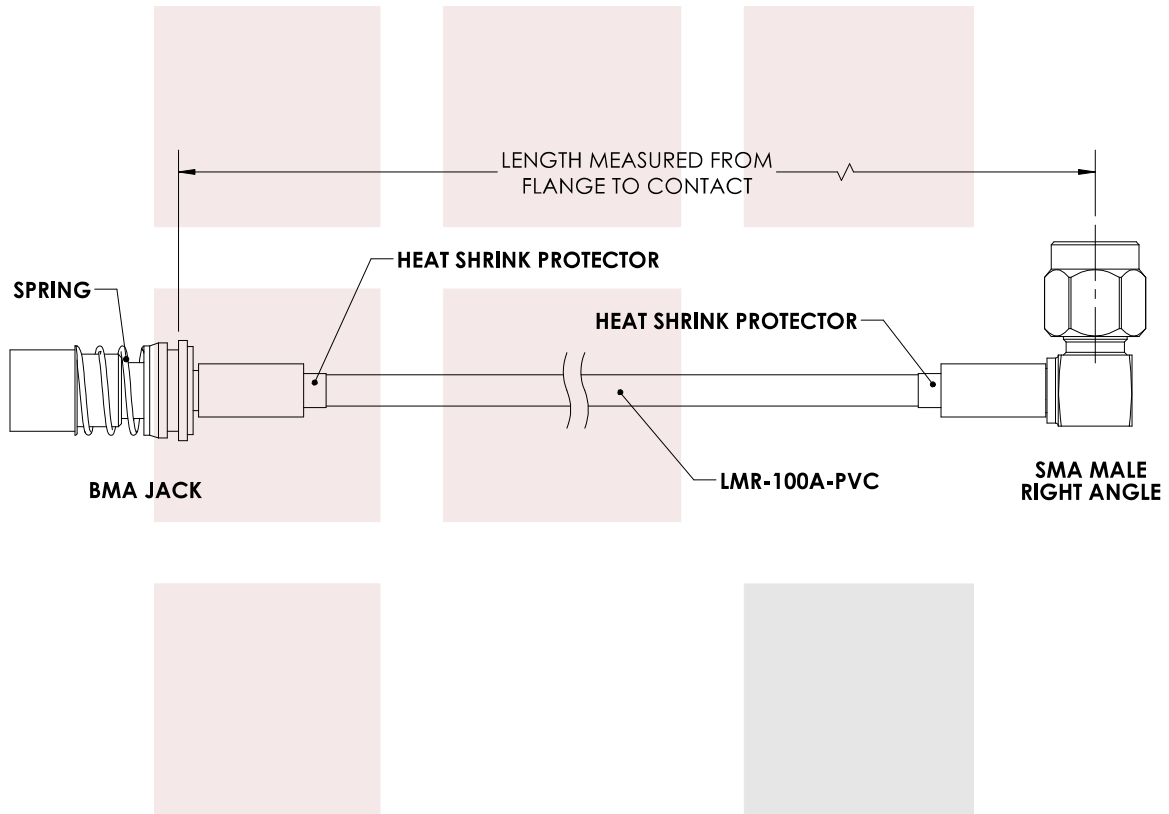
Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax FMCA1641](#)

URL: <https://www.fairviewmicrowave.com/bma-jack-ra-sma-male-cable-lmr100-coax-fmca1641-p.aspx>

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 to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





STANDARD TOLERANCES

- .X ±0.2
- .XX ±0.01
- .XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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- 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].

TITLE Snap-On BMA Jack to RA SMA Male Cable LMR-100 Coax	DWG NO FMCA1641	CAGE CODE 3FKR5		
	CAD FILE 12/28/2017	SHEET	SCALE N/A	SIZE A CN2245