

# FMCA1648-12 DATA SHEET

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

The BMA jack snap-on to BNC male 12 inch cable using LMR-100 coax, part number FMCA1648-12, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to BNC 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 FMCA1648-12 BMA jack to BNC male cable assembly operates to 3 GHz. 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			3		GHz
VSWR					1.4:1		
Return Loss					15.56		dB
Velocity of Propagation			6	66			%
RF Shielding		90					dB
Group Delay			1.54	[5.05]		ns/f	t [ns/m]
Capacitance			30.8 [	101.05	]	pF/f	t [pF/m]
Inductance			0.077	[0.25]		uH/f	t [uH/m]
DC Resistance Inner Conductor		81 [265.75]		$\Omega/1000$ ft [ $\Omega/$ Km]			
DC Resistance Outer Co	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	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.27	0.32	0.36	0.44	0.63	dB

### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 12 in [304.8 mm]
Diameter 0.57 in [14.48 mm]

#### **Cable**

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type

LMR-100A-PVC 50 Ohms Solid

Copper Clad Steel

PΕ



# **Configuration:**

- Snap-On BMA Jack
- BNC Male
- LMR-100A-PVC

#### Features:

- Max Frequency 3 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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Number of Shields

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PVC, Black

2

Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

Bending Moment

Flat Plate Crush

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]

Tensile Strength 15 lbs [6.8 Kg]

#### Connectors

Description	Connector :	L			
Туре	BMA Jack		BNC Male		
Specification		MIL-STD-348A			
Impedance	50 Ohms 50 Ohm				
Connection Method	Snap-On				
Contact Material & Plating	Beryllium Copper,	Brass, Gold			
Contact Plating Spec.	51.18µ in. minim	um	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 & Pla	iting		Brass, Nickel		
Coupling Nut Plating Spec.		100 µin minimum			

#### 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**

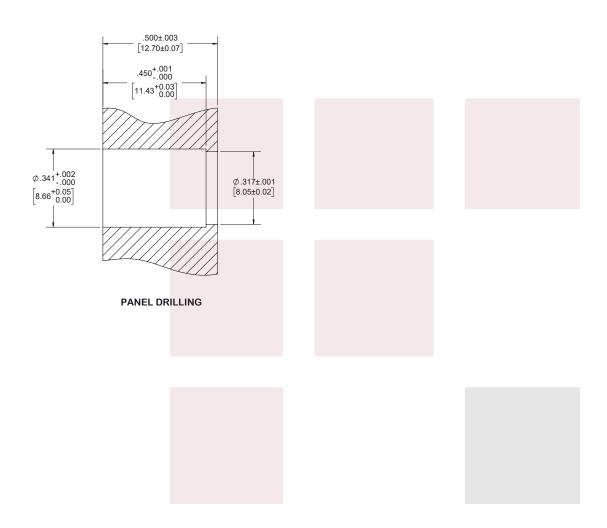
Notes:

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





#### **Typical Performance Data**



#### **How to Order**

Part Number Configuration: FN



Example: FMCA1648-12 = 12 inches long cable

FMCA1648-100cm = 100 cm long cable





Snap-On BMA Jack to BNC 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.

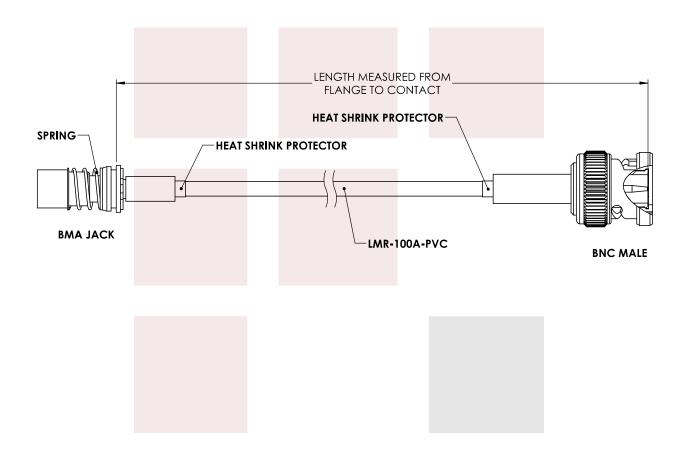
Click the following link to obtain additional part information: Snap-On BMA Jack to BNC Male Cable LMR-100 Coax in 12 Inch FMCA1648-12

URL: https://www.fairviewmicrowave.com/bma-jack-bnc-male-cable-lmr100-coax-fmca1648-12-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 BNC Male Cable LMR-100 Coax in 12 Inch	DWG NO FMCA1648			CAGE CODE 3FKR5		
III 12 IIIGII	CAD FILE 12/29/17	SHEET	SCAL	LE N/A SIZE A	CN2245	