

# FMCA1648-60 DATA SHEET

# Snap-On BMA Jack to BNC Male Cable LMR-100 Coax in 60 Inch

The BMA jack snap-on to BNC male 60 inch cable using LMR-100 coax, part number FMCA1648-60, 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 FMCA1648-60 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	Т	ур	Max	ι	Jnits		
Frequency Range	DC			3		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/f	t [ns/m]		
Capacitance		30.8 [	101.05	]	pF/ft [pF/m]			
Inductance		0.077	0.077 [0.25]			uH/ft [uH/m]		
DC Resistance Inner Conductor			81 [265.75]		Ω/1000ft [Ω/Km]			
DC Resistance Outer Conductor		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	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.55	0.8	1	1.4	2.35	dB

#### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 60 in [152.4 cm]
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

copper ciad st



# **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

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 sales@fairviewmicrowave.com





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	Connecto	r 1		Connector 2			
Туре	BMA Jac	k	BNC Male				
Specification			MIL-STD-348A				
Impedance	50 Ohm	S	50 Ohms				
Connection Method	Snap-Or	n					
Contact Material & Plating	Beryllium Copp	er, G	Gold Brass, Gold				
Contact Plating Spec.	51.18µ in. mir	51.18µ in. minimum 50 µin minim			num		
Dielectric Type	PTFE		PTFE				
Outer Cond Material & Plat	old						
Body Material & Plating	Passivated Stainl	ess S	Steel Brass, Nickel				
Body Plating Spec.				100 µin minimum			
Coupling Nut Material & Pla	Plating Brass, Nic			kel			
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**

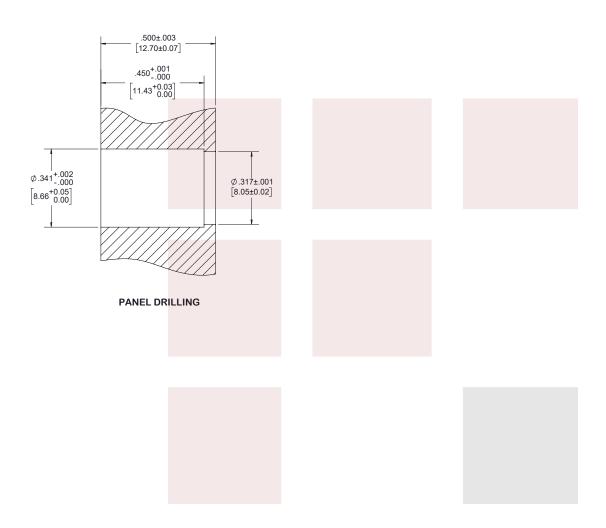
Notes:

<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: FMCA1648 - xx uu

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 60 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 60 Inch FMCA1648-60

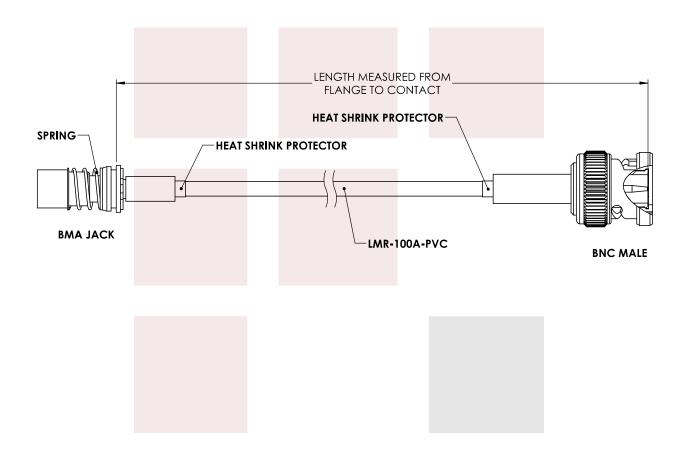
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order

URL: https://www.fairviewmicrowave.com/bma-jack-bnc-male-cable-lmr100-coax-fmca1648-60-p.aspx

to implem	ent improvement	s. Fairview	Microw	ave reserv	es the righ	nt to mak	ke such	changes	as req	uired.	Unless	otherwise
stated, al	specifications are	e nominal.	Fairvie	w Microwa	ve does n	ot make	any re	presentat	ion or	warran	ty reg	arding the
suitability	of the part descr	ibed herein	for any	particular	purpose,	and Fair	rview M	icrowave	does i	not ass	ume a	ny liability
arising ou	t of the use of an	y part or do	cument	ation.								







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 60 Inch	DWG NO FMCA16	CAGE CODE 3FKR5				
III OO IIIOII	CAD FILE 12/29/17	SHEET	SCAL	LE N/A SIZE A	CN2245	