

## FMCA1649-12 DATA SHEET

# Slide-On BMA Plug Bulkhead to BNC Male Cable LMR-100 Coax in 12 Inch

The BMA plug slide-on bulkhead to BNC male 12 inch cable using LMR-100 coax, part number FMCA1649-12, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to BNC cable assembly has a plug 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 FMCA1649-12 BMA plug to BNC male cable assembly operates to 3 GHz. Our RF cable assembly with BMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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		6	66			%
RF Shielding	90					dB
Group Delay		1.54	[5.05]		ns/f	t [ns/m]
Capacitance		30.8 [	101.0	5]	pF/f	t [pF/m]
Inductance		0.077	[0.25	]	uH/f	t [uH/m]
DC Resistance Inner Cor	nductor	81 [2	65.75]		Ω/100	0ft [Ω/Km]
DC Resistance Outer Cor	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 LMR-100A-PVC 50 Ohms





## **Configuration:**

- Slide-On BMA Plug Bulkhead
- 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





Inner Conductor Type

Inner Conductor Material and Plating

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 Solid

Copper Clad Steel

PE 2

Aluminum Tape Tinned Copper Braid

PVC, Black 0.11 in [2.79 mm]

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	Connector	Connector 2				
Туре	BMA Plug	BNC Male				
Mount Method	Bulkhead					
Specification	MIL-STD-348A					
Impedance	50 Ohms	50 Ohms				
Connection Method	Slide-On					
Contact Material & Plating	Beryllium Copper	r, Gold Brass, Gold				
Contact Plating Spec.	51.18µ in. minir	mum 50 µin minimum				
Dielectric Type	PTFE	PTFE				
Outer Cond Material & Plati	ng Passivated Stainles	ss Steel				
Body Material & Plating	Passivated Stainles	ss Steel Brass, Nickel				
Body Plating Spec.	100 µin minimum					
Coupling Nut Material & Plating Brass, Nickel						
Coupling Nut Plating Spec.		100 µin minimum				
Hex Size	8 mm					

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

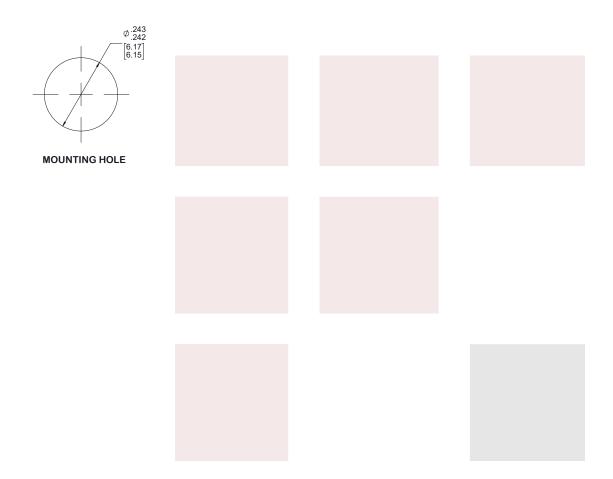
Copyright © 2018 REV 1.0 Page 2 of 5

<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**

Example: FMCA1649-12 = 12 inches long cable

FMCA1649-100cm = 100 cm long cable





Slide-On BMA Plug Bulkhead 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.

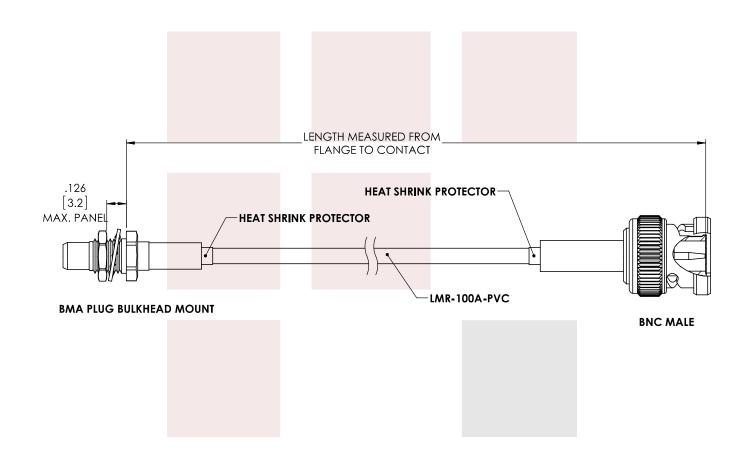
Click the following link to obtain additional part information: Slide-On BMA Plug Bulkhead to BNC Male Cable LMR-100 Coax in 12 Inch FMCA1649-12

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-plug-bnc-male-cable-lmr100-coax-fmca1649-12-p.aspx

to implement imp	rovements. Fairview	v Microwa	ave reserve	es the righ	t to mak	e such	changes a	as requ	ired. Unles	ss otl	herwise
stated, all specific	cations are nominal.	Fairvie	w Microwa	ve does no	ot make	any rep	resentat	ion or v	warranty re	gard	ling the
	part described hereir	-		purpose,	and Fair	view Mi	crowave	does n	ot assume	any	liability
arising out of the	use of any part or do	ocument	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	E SPECIFIED ALL DIMENSIC S ARE SUBJECT TO CHANGI N INCHES [mm].	ISIONS ARE NOMINAL, INGE WITHOUT NOTICE AT ANY TIME.			
Slide-On BMA Plug Bulkhead to BNC Male Cable LMR-	DWG NO FMCA16	CAGE CODE 3FKR5			
100 GOAX III 12 IIIGII	CAD FILE 12/29/17	SHEET	SCAL	LE N/A SIZE A	CN2245