

# FMCA1649-36 DATA SHEET

# Slide-On BMA Plug Bulkhead to BNC Male Cable LMR-100 Coax in 36 Inch

The BMA plug slide-on bulkhead to BNC male 36 inch cable using LMR-100 coax, part number FMCA1649-36, 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 FMCA1649-36 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		ć	6			%	
RF Shielding	90					dB	
Group Delay		1.54	[5.05]		ns/f	t [ns/m]	
Capacitance		30.8 [	.8 [101.05] p		pF/f	pF/ft [pF/m]	
Inductance		0.077	[0.25	]	uH/f	t [uH/m]	
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]			
DC Resistance Outer Conductor		9.5 [	31.17]		Ω/100	00ft [Ω/Km]	
Jacket Spark		2,000			Vrms		
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#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.41	0.56	0.68	0.92	1.49	dB

#### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 36 in [914.4 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

PE

Solid

Aluminum Tape Tinned Copper Braid

Copper Clad Steel

PVC, Black

0.11 in [2.79 mm]

15 lbs [6.8 Kg]

One Time Minimum Bend Radius Repeated Minimum Bend Radius

**Bending Moment** Flat Plate Crush Tensile Strength

Jacket Diameter

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]

**Connectors** 

Description	Connecto	r 1	Connector 2		
Туре	BMA Pluç	9	BNC Male		
Mount Method	Bulkhead	d			
Specification		MIL-STD-348A			
Impedance	50 Ohms	50 Ohms			
Connection Method	Slide-On	1			
Contact Material & Plating	Beryllium Coppe	old Brass, Gold			
Contact Plating Spec.	51.18µ in. min	m 50 µin minimum			
Dielectric Type	PTFE	PTFE			
Outer Cond Material & Plati	ng Passivated Stainle	ess S	Steel		
Body Material & Plating	Passivated Stainle	sivated Stainless Steel Brass, N			
Body Plating Spec. 100 µin mi					
Coupling Nut Material & Pla	Brass, Nickel				
Coupling Nut Plating Spec.			100 µin minimum		
Hex Size	8 mm	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:

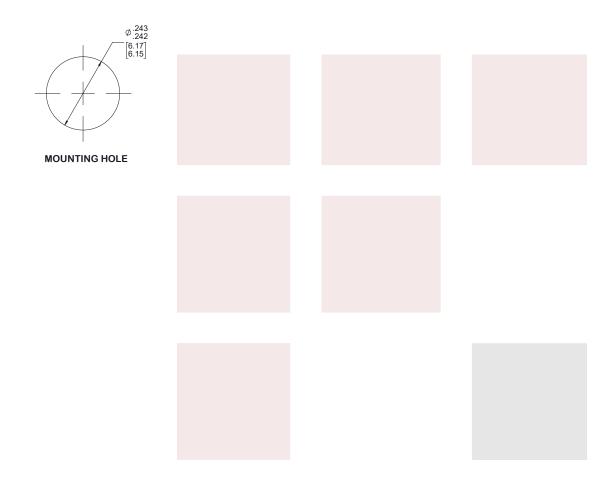
301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

<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:

FMCA1649 - xx uu

| cm = Centimeters |
| chlank > = Inches |
| Length

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 36 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.

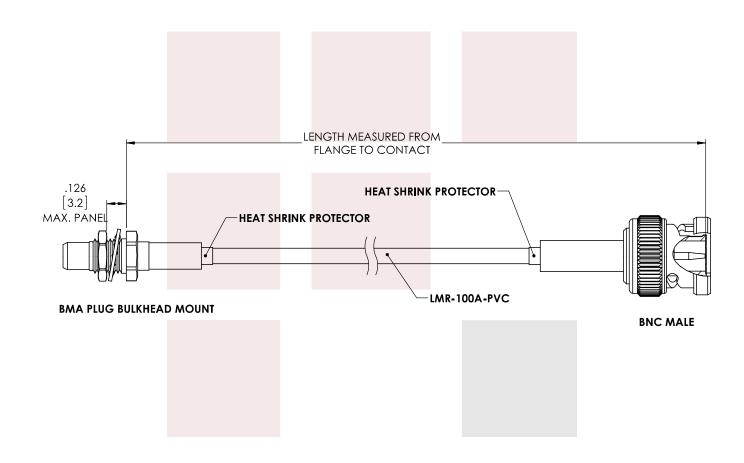
Click the following link to obtain additional part information: Slide-On BMA Plug Bulkhead to BNC Male Cable LMR-100 Coax in 36 Inch FMCA1649-36

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-fmca1649-36-p.aspx

to implem	ent improvemer	nts. Fairview	/ Microwa	ave reserve	es the righ	nt to mak	ke such	changes	as req	uired.	Unles	s oth	nerwise
stated, al	specifications a	are nominal.	Fairvie	w Microway	/e does n	ot make	any re	presentat	ion or	warra	nty re	gard	ing the
suitability	of the part des	cribed hereir	n for any	particular	purpose,	and Fair	view M	1icrowave	does	not as	sume	any	liability
arising ou	t of the use of a	iny 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	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].						
Slide-On BMA Plug Bulkhead to BNC Male Cable LMR-	DWG NO FMCA16	CAGE CODE 3FKR5					
100 COAX III 30 IIICII	CAD FILE 12/29/17	SHEET	SCAL	LE N/A SIZE A	CN2245		