



# Slide-On BMA Plug Bulkhead to N Male Cable LMR-100 Coax

The BMA plug slide-on bulkhead to type N male cable using LMR-100 coax, part number FMCA1645, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to type N 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 FMCA1645 BMA plug to type N 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	elocity of Propagation		66		%	
RF Shielding	90					dB
Group Delay		1.54	[5.05]		ns/f	t [ns/m]
Capacitance		30.8 [	101.05	5]	pF/f	t [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 [	9.5 [31.17]		Ω/1000ft [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.)	0.07	0.12	0.17	0.24	0.43	dB/ft
	0.23	0.39	0.56	0.79	1.41	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

0.8 in [20.32 mm]





# **Configuration:**

- Slide-On BMA Plug Bulkhead
- N 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





Cable

Cable Type **Impedance** 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

LMR-100A-PVC 50 Ohms Solid

Copper Clad Steel

PΕ 2

> Aluminum Tape Tinned Copper Braid

PVC, Black

0.11 in [2.79 mm]

15 lbs [6.8 Kg]

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	or 1	Connector 2	
Туре	BMA Plu	g N Male		
Mount Method	Bulkhea	id		
Specification			MIL-STD-348A	
Impedance	50 Ohm	ns	50 Ohms	
Connection Method	Slide-O	n		
Contact Material & Plating	Beryllium Copp	er, Gold	Brass, Gold	
Contact Plating Spec.	51.18µ in. mi	nimum	30 µin minimum	
Dielectric Type	PTFE		PTFE	
Outer Cond Material & Plati	ng Passivated Stain	less Ste	el	
Body Material & Plating	Passivated Stain	less Ste	el Brass, Nickel	
Body Plating Spec.		100 µin minimum		
Coupling Nut Material & Pla	iting		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

REV 1.0 Page 2 of 5

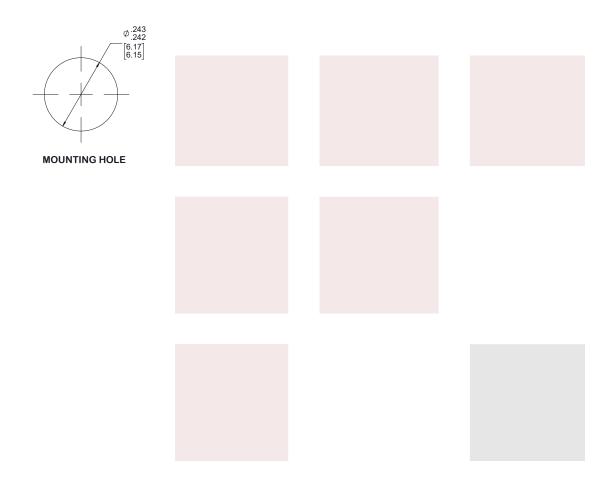
Copyright © 2018

<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: FMCA1645-12 = 12 inches long cable

FMCA1645-100cm = 100 cm long cable





Slide-On BMA Plug Bulkhead to N 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.

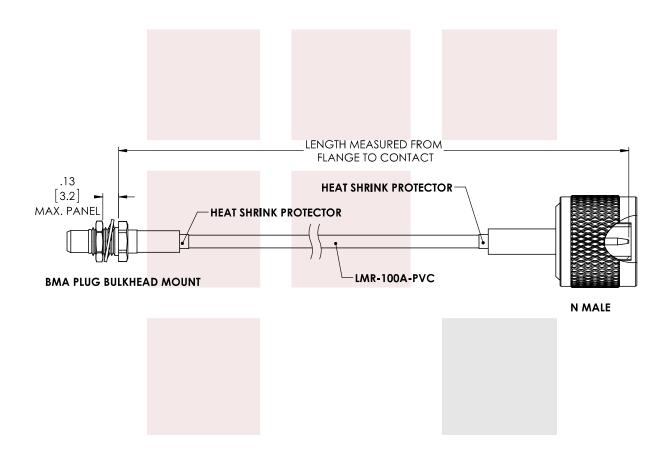
Click the following link to obtain additional part information: Slide-On BMA Plug Bulkhead to N Male Cable LMR-100 Coax FMCA1645

URL: https://www.fairviewmicrowave.com/bma-plug-n-male-cable-Imr100-coax-fmca1645-p.aspx









STANDARD TOLERANCES
.X ±0.2
.X ±0.01

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 N Male Cable LMR-100	DWG NO FMCA1645			CAGE CODE 3FKR5	
Codx	CAD FILE 12/29/17	SHEET	SCAL	LE N/A SIZE A	CN2245