

# FMCA1645-24 DATA SHEET

# Slide-On BMA Plug Bulkhead to N Male Cable LMR-100 Coax in 24 Inch

The BMA plug slide-on bulkhead to type N male 24 inch cable using LMR-100 coax, part number FMCA1645-24, 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 FMCA1645-24 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		e	6			%
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	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.)	0.34	0.44	0.54	0.68	1.06	dB

### **Mechanical Specifications**

**Cable Assembly** Length\* Diameter

Cable Cable Type Impedance 24 in [609.6 mm] 0.8 in [20.32 mm]

LMR-100A-PVC 50 Ohms



# **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

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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 Copper Clad Steel PE 2 Aluminum Tape Tinned Copper Braid PVC, Black 0.11 in [2.79 mm]

Solid

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 1	Connector 2		
Туре	BMA Plug	N Male		
Mount Method	Bulkhead	Bulkhead		
Specification		MIL-STD-348A		
Impedance	50 Ohms	50 Ohms		
Connection Method	Slide-On			
Contact Material & Plating	Beryllium Copper, G	Gold Brass, Gold		
Contact Plating Spec.	51.18µ in. minimu	i <mark>m 30 µin minim</mark> um		
Dielectric Type	PTFE	PTFE		
Outer Cond Material & Plati	ing Passivated Stainless	Steel		
Body Material & Plating	Passivated Stainless	Steel Brass, Nickel		
Body Plating Spec.	100 µin minimum			
Coupling Nut Material & Pla	ating	Brass, Nickel		
Coupling Nut Plating Spec.		100 µin minimum		
Hex Size	8 mm			

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm$  3/8", whichever is greater.

#### **Environmental Specifications**

Temperature

Operating Range

-40 to +85 deg C

Compliance Certifications (see product page for current document)

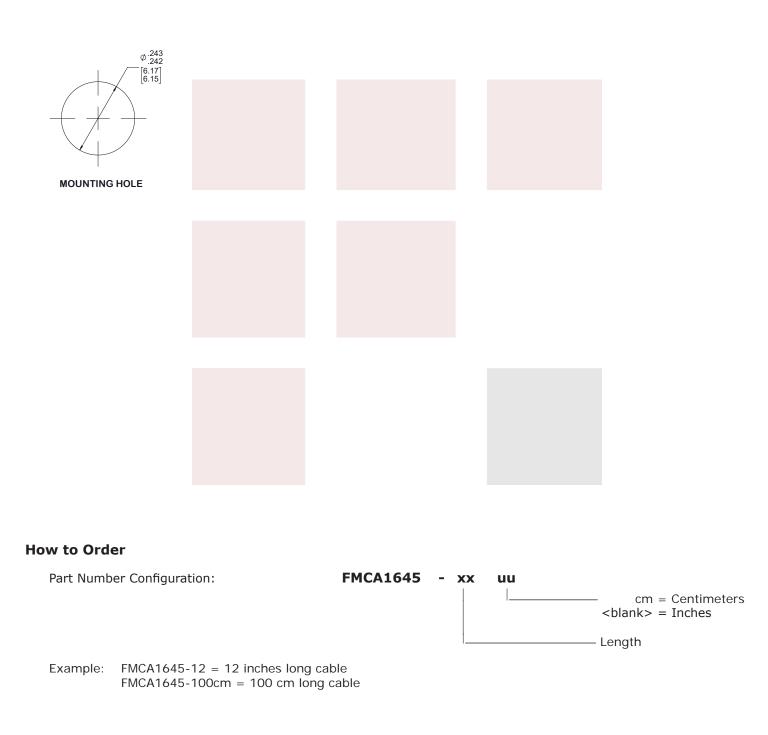
### **Plotted and Other Data**

Notes:





#### **Typical Performance Data**



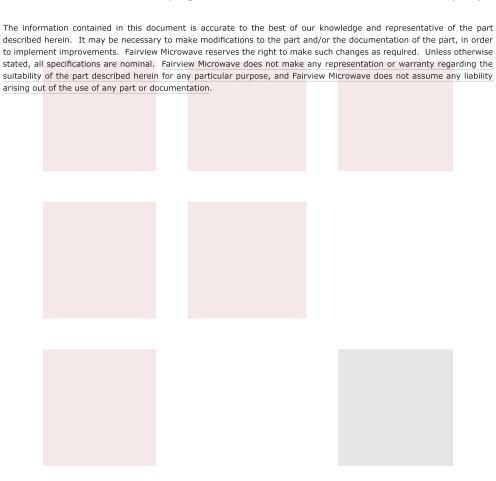




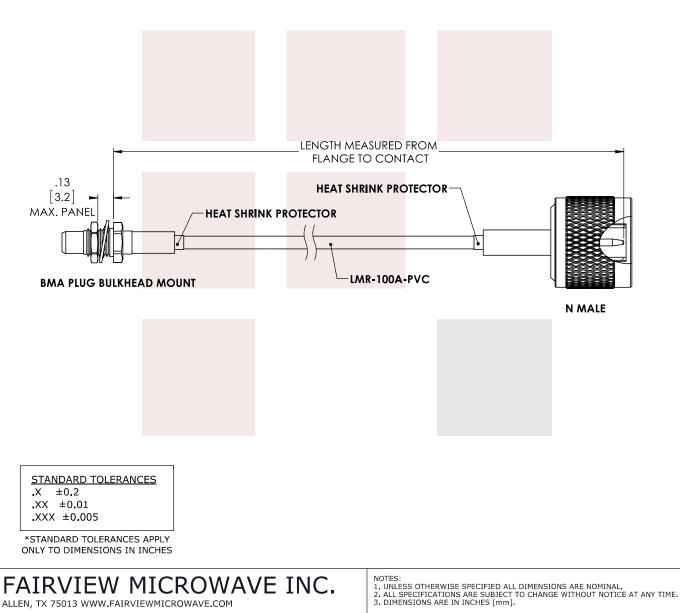
Slide-On BMA Plug Bulkhead to N Male Cable LMR-100 Coax in 24 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Slide-On BMA Plug Bulkhead to N Male Cable LMR-100 Coax in 24 Inch FMCA1645-24

URL: https://www.fairviewmicrowave.com/bma-plug-n-male-cable-Imr100-coax-fmca1645-24-p.aspx







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3. DIMENSIONS ARE IN INCHES [mm].

TITLE
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Coax in 24 Inch
CAD FILE 12/29/17 SHEET
SCALE N/A SIZE A