

FMCA1638-24 DATA SHEET

Slide-On BMA Plug Bulkhead to Snap-On BMA Jack Cable LMR-100 Coax in 24 Inch

The BMA plug slide-on bulkhead to BMA jack snap-on 24 inch cable using LMR-100 coax, part number FMCA1638-24, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to BMA cable assembly has a plug to jack 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 FMCA1638-24 BMA plug to BMA jack cable assembly operates to 5.8 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 | | | 5.8 | | 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 | 5] | 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 | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.44 | 0.54 | 0.68 | 1 | 1.48 | dB |

Mechanical Specifications

Cable Assembly

Length* 24 in [609.6 mm] Diameter 0.35 in [8.89 mm]

Cable

Cable Type Impedance LMR-100A-PVC 50 Ohms



Configuration:

- Slide-On BMA Plug Bulkhead
- Snap-On BMA Jack
- LMR-100A-PVC

Features:

- Max Frequency 5.8 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 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 1 | Connector 2 |
|-----------------------------|---------------------------|----------------------------------|
| Туре | BMA Plug | BMA Jack |
| Mount Method | Bulkhead | |
| Impedance | 50 Ohms | 50 Ohms |
| Connection Method | Slide-On | Snap-On |
| Contact Material & Plating | Beryllium Copper, G | old Beryllium Copper, Gold |
| Contact Plating Spec. | 51.18µ in. minimu | m 51.18µ in. minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Cond Material & Plati | ng Passivated Stainless S | Steel Beryllium Copper, Gold |
| Body Material & Plating | Passivated Stainless S | Steel Passivated Stainless Steel |
| 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

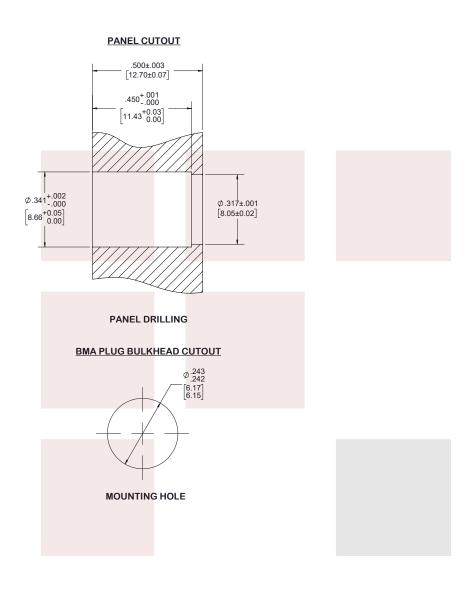
Notes:

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





Typical Performance Data



How to Order

Part Number Configuration:

FMCA1638 - xx uu

cm = Centimeters

clank> = Inches

Example: FMCA1638-12 = 12 inches long cable

FMCA1638-100cm = 100 cm long cable





Slide-On BMA Plug Bulkhead to Snap-On BMA Jack 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 Snap-On BMA Jack Cable LMR-100 Coax in 24 Inch FMCA1638-24

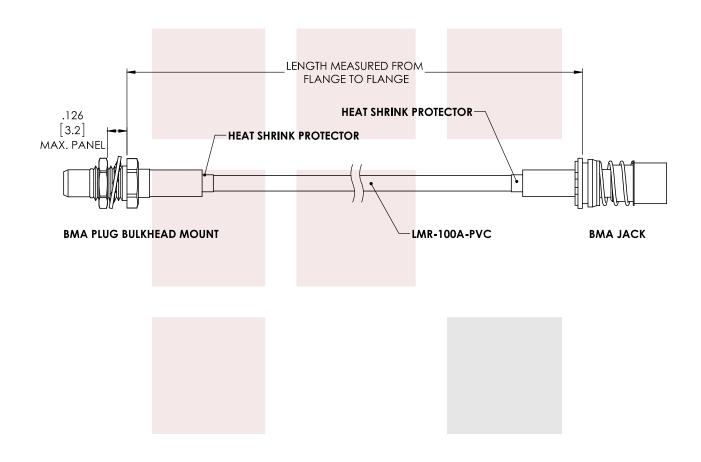
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order

URL: https://www.fairviewmicrowave.com/bma-plug-bma-jack-cable-lmr100-coax-fmca1638-24-p.aspx

| to implement improvements. | Fairview Micro | wave reserv | es the righ | t to mak | e such | changes a | as requi | ired. Unle | ss oth | erwise |
|---------------------------------|-----------------|---------------|-------------|----------|---------|-----------|----------|------------|--------|----------|
| stated, all specifications are | | | | | | | | | | |
| suitability of the part describ | ed herein for a | ny particular | purpose, | and Fair | view Mi | crowave | does no | ot assume | any I | iability |
| arising out of the use of any | part or docume | ntation. | | | | | | | | |
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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 Snap-On BMA Jack Cable LMR-100 Coax in 24 Inch | DWG NO FMCA16 | CAGE CODE 3FKR5 | | | |
| Cable Livin-100 Coax III 24 IIICII | CAD FILE 12/26/17 | SHEET | SCAL | LE N/A SIZE | A CN2245 |