

## FMCA1637-36 DATA SHEET

# Slide-On BMA Plug Bulkhead to Slide-On BMA Jack 2 Hole Flange Cable LMR-100 Coax in 36 Inch

The BMA plug slide-on bulkhead to BMA jack slide-on 2 hole flange 36 inch cable using LMR-100 coax, part number FMCA1637-36, from Fairview Microwave is instock 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 FMCA1637-36 BMA plug to BMA jack cable assembly operates to 5.8 GHz. Our RF cable assembly with BMA bulkhead and BMA 2 hole flange 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           | 56     |                 |       | %          |
| 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 Cor       | nductor | 9.5 [       | 31.17] |                 | Ω/100 | Oft [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.) | 0.56 | 0.71 | 0.92 | 1.4 | 2.12 | dB    |

## **Mechanical Specifications**

## **Cable Assembly**

Length\* 36 in [914.4 mm] Diameter 0.75 in [19.05 mm]

#### Cable

Cable Type LMR-100A-PVC Impedance 50 Ohms



- Slide-On BMA Plug Bulkhead
- Slide-On BMA Jack 2 Hole Flange
- 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

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 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-r

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                  | 2 Hole Flange                |
| Impedance                   | 50 Ohms                   | 50 Ohms                      |
| Connection Method           | Slide-On                  | Slide-On                     |
| Contact Material & Plating  | Beryllium Copper, G       | old Beryllium Copper, Gold   |
| Contact Plating Spec.       | 51.18µ in. minimu         | m                            |
| Dielectric Type             | PTFE                      | PTFE                         |
| Outer Cond Material & Plati | ng Passivated Stainless S | Steel Beryllium Copper, Gold |
| Body Material & Plating     | Passivated Stainless S    | Steel Brass, Tri-Metal       |
| 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

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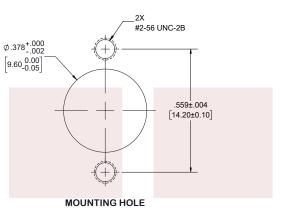
<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

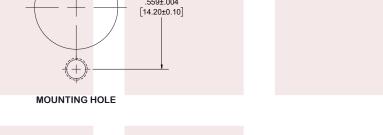


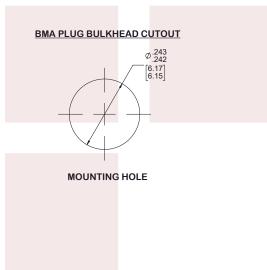


### **Typical Performance Data**

#### **2 HOLE FLANGE CUTOUT**









#### **How to Order**

Part Number Configuration:

FMCA1637 - xx uu cm = Centimeters <br/><br/>lank> = Inches - Length

Example: FMCA1637-12 = 12 inches long cable

FMCA1637-100cm = 100 cm long cable





Slide-On BMA Plug Bulkhead to Slide-On BMA Jack 2 Hole Flange 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.

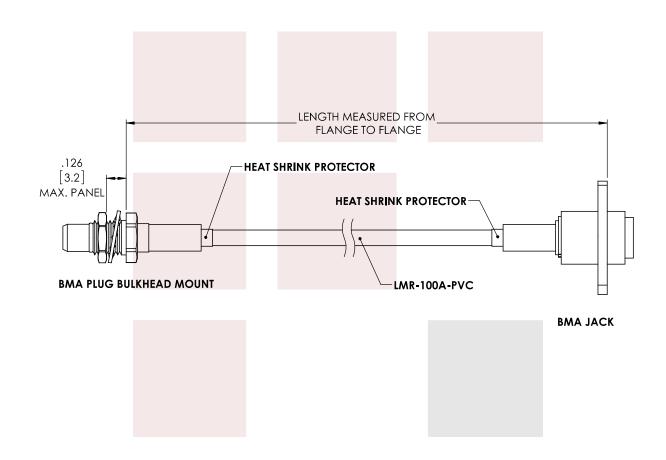
Click the following link to obtain additional part information: Slide-On BMA Plug Bulkhead to Slide-On BMA Jack 2 Hole Flange Cable LMR-100 Coax in 36 Inch FMCA1637-36

The information contained in this document is accurate to the best of our knowledge and representative of the part

URL: https://www.fairviewmicrowave.com/bma-plug-bma-jack-cable-lmr100-coax-fmca1637-36-p.aspx

| described   | herein. It may be necessar     | y to make m  | odifications to the part a | and/or t | he documentation of the par  | t, in order  |
|-------------|--------------------------------|--------------|----------------------------|----------|------------------------------|--------------|
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STANDARD TOLERANCES ,X ±0.2 ,XX ±0.01 ,XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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|---|---|-------|------|-----------------|--------|--|
| Slide-On BMA Plug Bulkhead to Slide-On BMA Jack 2 Hole Flange Cable LMR-100 Coax in 36 Inch | DWG NO FMCA1637   |       |      | cage code 3FKR5 |        |  |
| Hole Hange Cable Link 100 Coax III 30 Inch  | CAD FILE 12/26/17   | SHEET | SCAL | LE N/A SIZE A   | CN2245 |  |