

FMCA1640-60 DATA SHEET

Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 Coax in 60 Inch

The BMA plug slide-on bulkhead to SMA male 60 inch cable using LMR-100 coax, part number FMCA1640-60, from Fairview Microwave is in-stock and ships same day. This Fairview BMA to SMA 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 FMCA1640-60 BMA plug to SMA male 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 | Гур Мах | | Units | |
|-------------------------|---------|---------------|---------|-----------------|-------|------|
| Frequency Range | DC | | | 5.8 | | GHz |
| VSWR | | | | 1.4:1 | | |
| Return Loss | | | | 15.56 | | dB |
| Velocity of Propagation | | 66 | | % | | |
| RF Shielding | 90 | | | | | dB |
| Group Delay | | 1.54 [5.05] | | ns/ft [ns/m] | | |
| Capacitance | | 30.8 [101.05] | | pF/ft [pF/m] | | |
| Inductance | | 0.077 [0.25] | | uH/ft [uH/m] | | |
| DC Resistance Inner Cor | ductor | 81 [265.75] | | Ω/1000ft [Ω/Km] | | |
| DC Resistance Outer Cor | nductor | 9.5 [31.17] | | Ω/1000ft [Ω/Km] | | |
| Jacket Spark | | | | 2,000 | ١ | /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.) | 0.8 | 1.05 | 1.4 | 2.2 | 3.4 | dB |

Mechanical Specifications

Cable Assembly Length* Diameter

Cable

Cable Type Impedance 60 in [152.4 cm] 0.315 in [8 mm]

LMR-100A-PVC 50 Ohms



Configuration:

- Slide-On BMA Plug Bulkhead
- SMA Male
- 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

www.fairviewmicrowave.com sales@fairviewmicrowave.com REV 1.0 Page 1 of 5

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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 | SMA Male | |
| Mount Method | Bulkhead | | |
| Specification | | MIL-STD-348A | |
| Impedance | 50 Ohms | 50 Ohms | |
| Connection Method | Slide-On | | |
| Contact Material & Plating | Beryllium Copper, Gold | Brass, Gold | |
| Contact Plating Spec. | 51.18µ in. m <mark>inimu</mark> m | MIL-G-45204 | |
| Dielectric Type | PTFE | PTFE | |
| Outer Cond Material & Plat | ing Passivated Stainless Ste | el | |
| Body Material & Plating | Passivated Stainless Ste | el Passivated Stainless Steel | |
| Hex Size | 8 mm | 5/16 inch | |

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

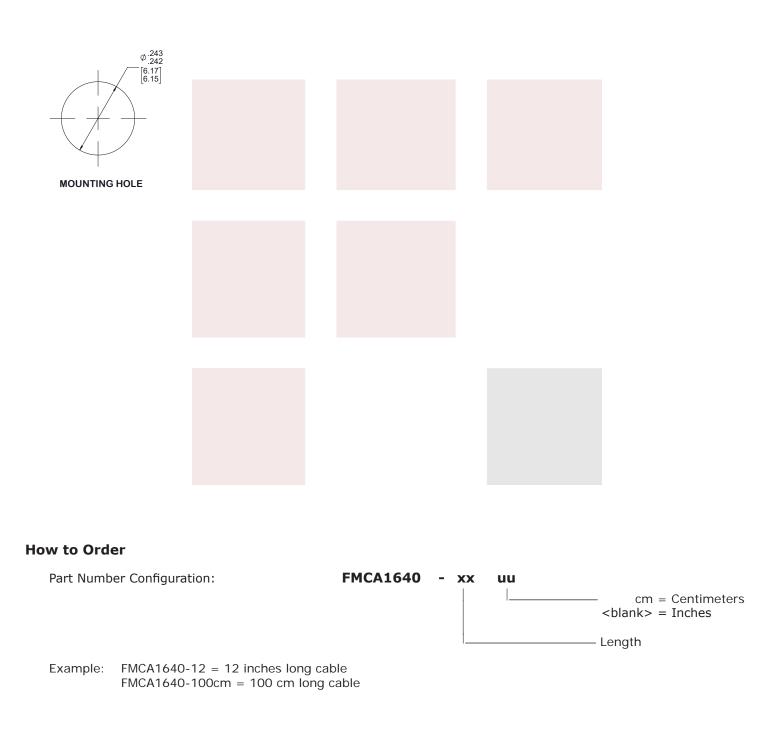
Notes:

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Typical Performance Data



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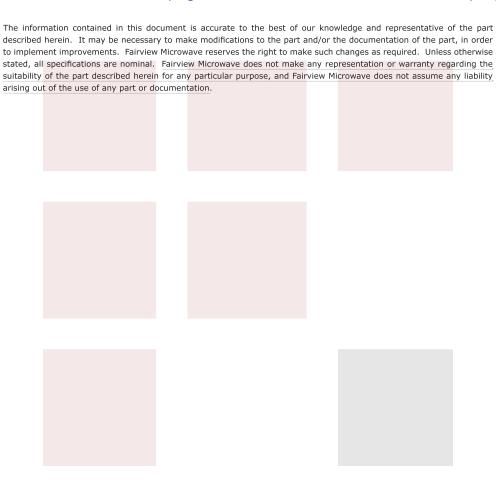




Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 Coax in 60 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

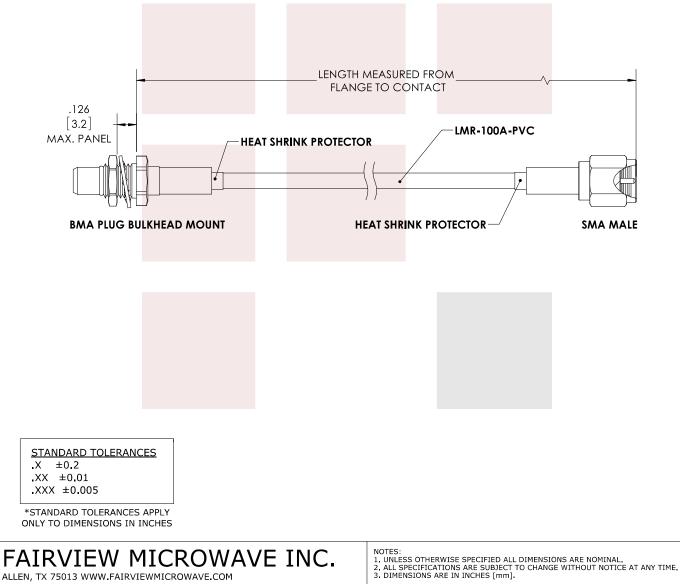
Click the following link to obtain additional part information: Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 Coax in 60 Inch FMCA1640-60

URL: https://www.fairviewmicrowave.com/bma-plug-sma-male-cable-Imr100-coax-fmca1640-60-p.aspx









Slide-On BMA Plug Bulkhead to SMA Male Cable LMR-100 Coax in 60 Inch

TITLE

| 3. DIMENSIONS ARE IN INCHES [mm]. | | | | | | | |
|-----------------------------------|-------|------|---------|--------|--------|--|--|
| DWG NO FMCA1640 | | | CAGE CO | | FKR5 | | |
| CAD FILE 11/27/2017 | SHEET | SCAL | E N/A | SIZE A | CN2245 | | |

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