

Slide-On BMA Plug Bulkhead to Snap-On BMA Jack Cable FM-SR086TBJ Coax

FMCA1565



Configuration

- Connector 1: Slide-On BMA Plug Bulkhead
- Connector 2: Snap-On BMA Jack
- Cable Type: FM-SR086TBJ
- Coax Flex Type: Formable

Features

- Max Frequency 20 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket

Applications

- General Purpose
- Laboratory Use
- Rack and Panel
- BMA Cable RF Backplanes
- Phased Array Interconnects
- High Speed Switching Networks
- Blind Mate BMA Test

Description

The BMA plug slide-on bulkhead to BMA jack snap-on cable using FM-SR086TBJ coax, part number FMCA1565, 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 formable FM-SR086TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA1565 BMA plug to BMA jack cable assembly operates to 20 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.

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 | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|---------------|---------|-----------------------|
| Frequency Range | DC | | 20 | GHz |
| VSWR | | | 1.5:1 | |
| Return Loss | | | 15.56 | dB |
| Velocity of Propagation | | 69.5 | | % |
| RF Shielding | 100 | | | dB |
| Group Delay | | 1.43 [4.69] | | ns/ft [ns/m] |
| Capacitance | | 29 [95.14] | | pF/ft [pF/m] |
| DC Resistance Inner Conductor | | 65.7 [215.55] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 10.2 [33.46] | | Ohms/1000ft [Ohms/Km] |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|------------------------|---------|---------|---------|-------|
| Operating Voltage (AC) | | | 350 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|-------|-------|-------|------|-------|
| Frequency | 1 | 2 | 4.5 | 9 | 20 | GHz |
| Insertion Loss (Typ.) | 0.225 | 0.306 | 0.508 | 0.759 | 1.2 | dB/ft |
| | 0.74 | 1 | 1.67 | 2.49 | 3.94 | 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

Width/Diameter0.35 in [8.89 mm]

Cable

Cable TypeFM-SR086TBJ
Impedance50 Ohms
Inner Conductor TypeSolid
Inner Conductor Material and PlatingCopper Clad Steel, Silver
Dielectric TypePTFE
Number of Shields1
Outer Conductor 1 Material and PlatingTinned Copper Composite Braid
Jacket MaterialFEP, Black
Jacket Diameter0.105 in [2.67 mm]
One Time Minimum Bend Radius0.5 in [12.7 mm]
Repeated Minimum Bend Radius0.787 in [19.99 mm]

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Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------------|--------------------|------------------------|
| Type | BMA Plug Bulkhead | BMA Jack |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Connection Method | Slide-On | Snap-On |
| Contact Material and Plating | Bronze, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | 51.18µ in. minimum | 51.18µ in. minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Brass, Tri-Metal | Beryllium Copper, Gold |
| Outer Conductor Plating Specification | 78.74µ in. minimum | |
| Body Material and Plating | Brass, Tri-Metal | Stainless Steel, Gold |
| Body Plating Specification | 78.74µ in. minimum | 19.68µ in. minimum |
| Hex Size | 8 mm | |

Environmental Specifications

Operating Range Temperature -40 to +105 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

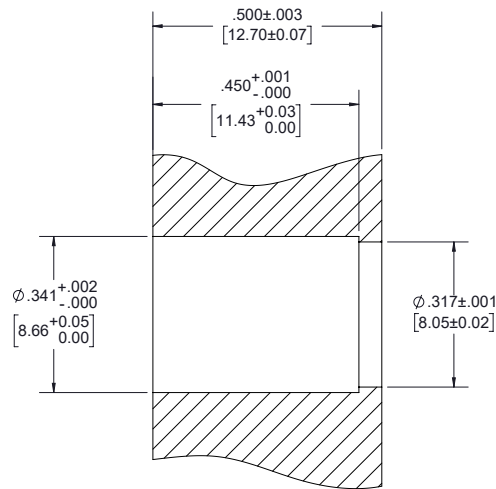
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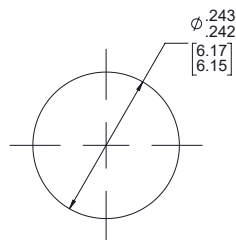
Typical Performance Data

PANEL CUTOUT



PANEL DRILLING

BMA PLUG BULKHEAD CUTOUT



MOUNTING HOLE

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How to Order

Part Number Configuration:

FMCA1565 **- xx** **uu**

_____ Unit of Measure:
cm = Centimeters
<blank> = Inches

_____ Length

_____ Base Number

Example: FMCA1565-12 = 12 inches long cable
FMCA1565-100cm = 100 cm long cable

Slide-On BMA Plug Bulkhead to Snap-On BMA Jack Cable FM-SR086TBJ Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Slide-On BMA Plug Bulkhead to Snap-On BMA Jack Cable FM-SR086TBJ Coax FMCA1565](https://www.fairviewmicrowave.com/bma-plug-bma-jack-cable-rg405-type-.086-coax-fmca1565-p.aspx)

URL: <https://www.fairviewmicrowave.com/bma-plug-bma-jack-cable-rg405-type-.086-coax-fmca1565-p.aspx>

The information contained within 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 to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMCA1565 CAD Drawing

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