

**Slide-On BMA Plug Bulkhead to RA SMA Male Cable  
 RG-316 Coax**

The BMA plug slide-on bulkhead to RA SMA male cable using RG-316 coax, part number FMCA1643, 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 RG316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1643 BMA plug to SMA male cable assembly operates to 3 GHz. The right angle SMA interface on the RG316 cable allows for easier connections in tight spaces. 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	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Return Loss			15.56	dB
Velocity of Propagation		69		%
Operating Voltage (AC)			250	Vrms
Jacket Spark			2,000	Vrms

**Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.11	0.15	0.27	0.38	0.58	dB/ft
	0.36	0.49	0.89	1.25	1.9	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**

Diameter 0.315 in [8 mm]

**Cable**

Cable Type RG316  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 1



**Configuration:**

- Slide-On BMA Plug Bulkhead
- SMA Male Right Angle
- RG316

**Features:**

- Max Frequency 3 GHz
- 69% 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

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Shield Layer 1 Silver Plated Copper Braid  
 Jacket Material FEP, Tan  
 Jacket Diameter 0.098 in [2.49 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	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. minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Passivated Stainless Steel	
Body Material & Plating	Passivated Stainless Steel	Brass, Nickel
Body Plating Spec.		100 µin minimum
Coupling Nut Material & Plating		Brass, Nickel
Coupling Nut Plating Spec.		100 µin minimum
Hex Size	8 mm	5/16 inch
Torque		3 in-lbs [0.34 Nm]

**Mechanical Specification Notes:**

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

**Environmental Specifications**

**Temperature**

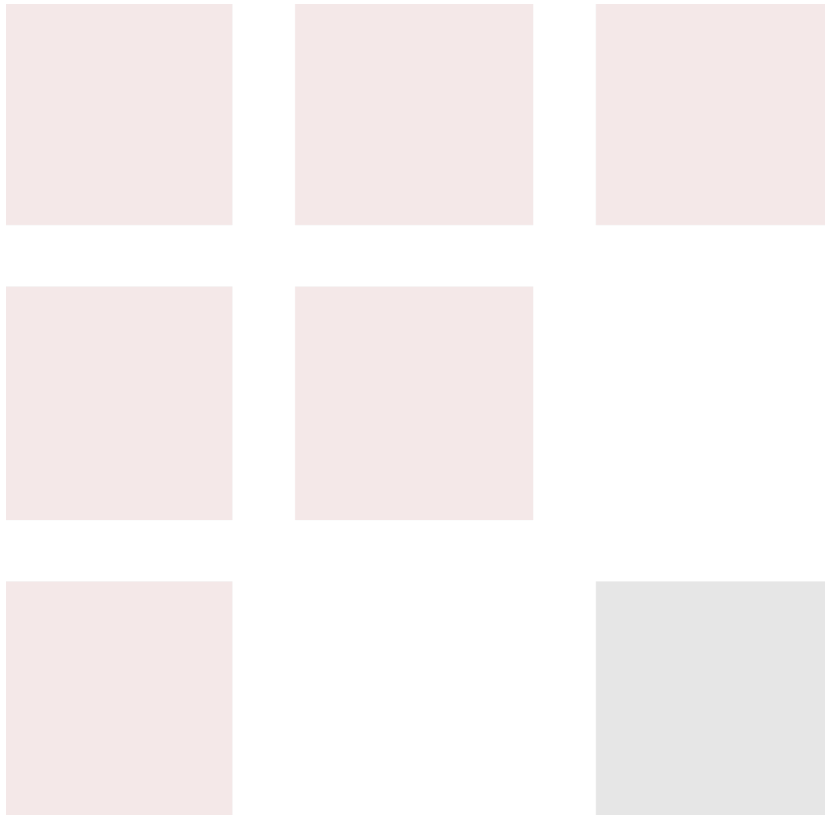
Operating Range -55 to +125 deg C

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

**Plotted and Other Data**

Notes:

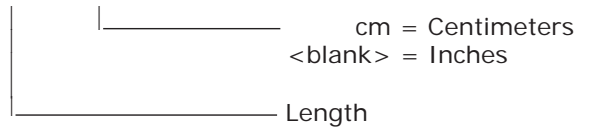
**Typical Performance Data**



**How to Order**

Part Number Configuration:

**FMCA1643 - xx uu**



Example: FMCA1643-12 = 12 inches long cable  
 FMCA1643-100cm = 100 cm long cable

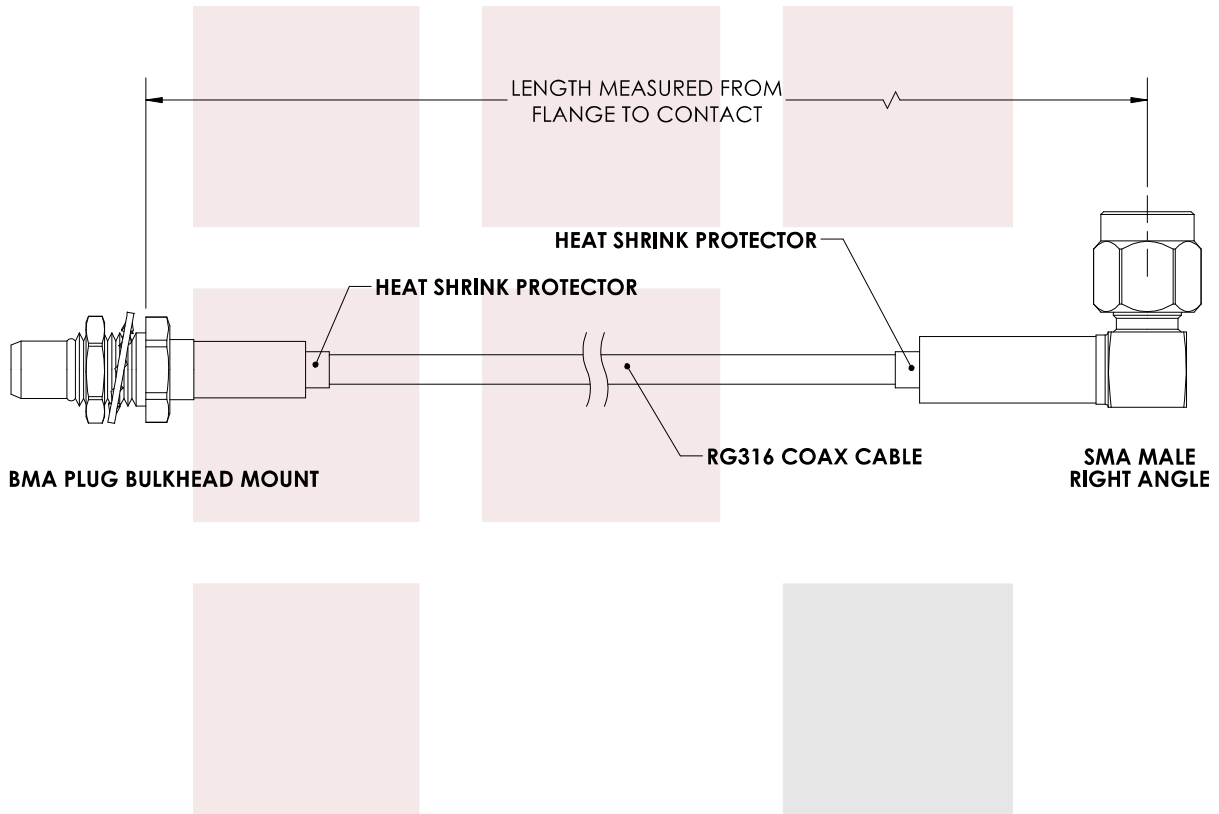
Slide-On BMA Plug Bulkhead to RA SMA Male Cable RG-316 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Slide-On BMA Plug Bulkhead to RA SMA Male Cable RG-316 Coax FMCA1643](#)

URL: <https://www.fairviewmicrowave.com/bma-plug-ra-sma-male-cable-rg316-coax-fmca1643-p.aspx>

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 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 any liability arising out of the use of any part or documentation.





**STANDARD TOLERANCES**

.X ±0.2  
 .XX ±0.01  
 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**FAIRVIEW MICROWAVE INC.**

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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].

TITLE Slide-On BMA Plug Bulkhead to RA SMA Male Cable RG-316 Coax	DWG NO FMCA1643	CAGE CODE 3FKR5		
	CAD FILE 01/02/2018	SHEET	SCALE N/A	SIZE A CN2245