

## Snap-On RA MMBX Plug to RA SMA Male Cable RG316 Coax in 12 Inch

Fairview Microwave's MMBX cable assemblies are part of our full line of RF interconnects available for same-day shipping. These MMBX cable assemblies are designed for test applications or connection of your MMBX system components. With a high frequency range up to 3 GHz, this family of MMBX cables can also be used to connect your panels to PCB's with between series options like MMBX-to-SMA, MMBX-to-N or MMBX-to-TNC assemblies. There are hundreds of possible cable assembly configurations to choose from, all available same day.

This MMBX cable assembly datasheet PDF contains specifications, CAD drawing and dimensions that are shown below. Fairview Microwave not only has many MMBX cable assembly options, but also a wide selection of RF, microwave and millimeter wave cable assemblies which allows RF designers to customize their configurations to whatever is required. Whether the need is to provide an I/O for a board design or simply create a custom cable assembly configuration, Fairview Microwave has the right cable assemblies for the job. Fairview can also expertly build your custom RF cable assemblies for you and ship same day.

### 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     |       | %     |
| 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 (Max.) | 0.31 | 0.37 | 0.44 | 0.58 | 0.78 | dB    |

### Mechanical Specifications

#### Cable Assembly

|          |                  |
|----------|------------------|
| Length*  | 12 in [304.8 mm] |
| 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                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Tan                   |
| Jacket Diameter                      | 0.098 in [2.49 mm]         |



### Configuration:

- Snap-On MMBX Plug Right Angle
- SMA Male Right Angle
- RG316

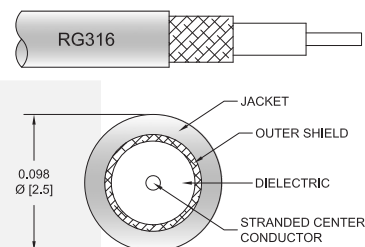
### Features:

- Max. Operating Frequency of 3 GHz
- Snap-On mating

### Applications:

- General Purpose MMBX Test
- PCB Testing
- Low Profile MMBX Cable Jumpers
- PCB-to-Panel Connection

### Cable Diagram:



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## Connectors

| Description                     | Connector 1            | Connector 2        |
|---------------------------------|------------------------|--------------------|
| Type                            | MMBX Plug              | SMA Male           |
| Specification                   |                        | MIL-STD-348A       |
| Impedance                       | 50 Ohms                | 50 Ohms            |
| Connection Method               | Snap-On                |                    |
| Mating Cycles                   | 100                    |                    |
| Contact Material & Plating      | Beryllium Copper, Gold | Brass, Gold        |
| Contact Plating Spec.           |                        | 50 µin minimum     |
| Dielectric Type                 | PTFE                   | PTFE               |
| Outer Cond Material & Plating   | Brass, Gold            |                    |
| Body Material & Plating         | Brass, Gold            | Brass, Nickel      |
| Body Plating Spec.              |                        | 100 µin minimum    |
| Coupling Nut Material & Plating |                        | Brass, Nickel      |
| Coupling Nut Plating Spec.      |                        | 100 µin minimum    |
| Hex Size                        |                        | 5/16 inch          |
| Torque                          |                        | 3 in-lbs [0.34 Nm] |

## 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 -55 to +155 deg C

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

## Plotted and Other Data

Notes:

## How to Order

Part Number Configuration:

**FMCA1428 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA1428-12 = 12 inches long cable  
FMCA1428-100cm = 100 cm long cable

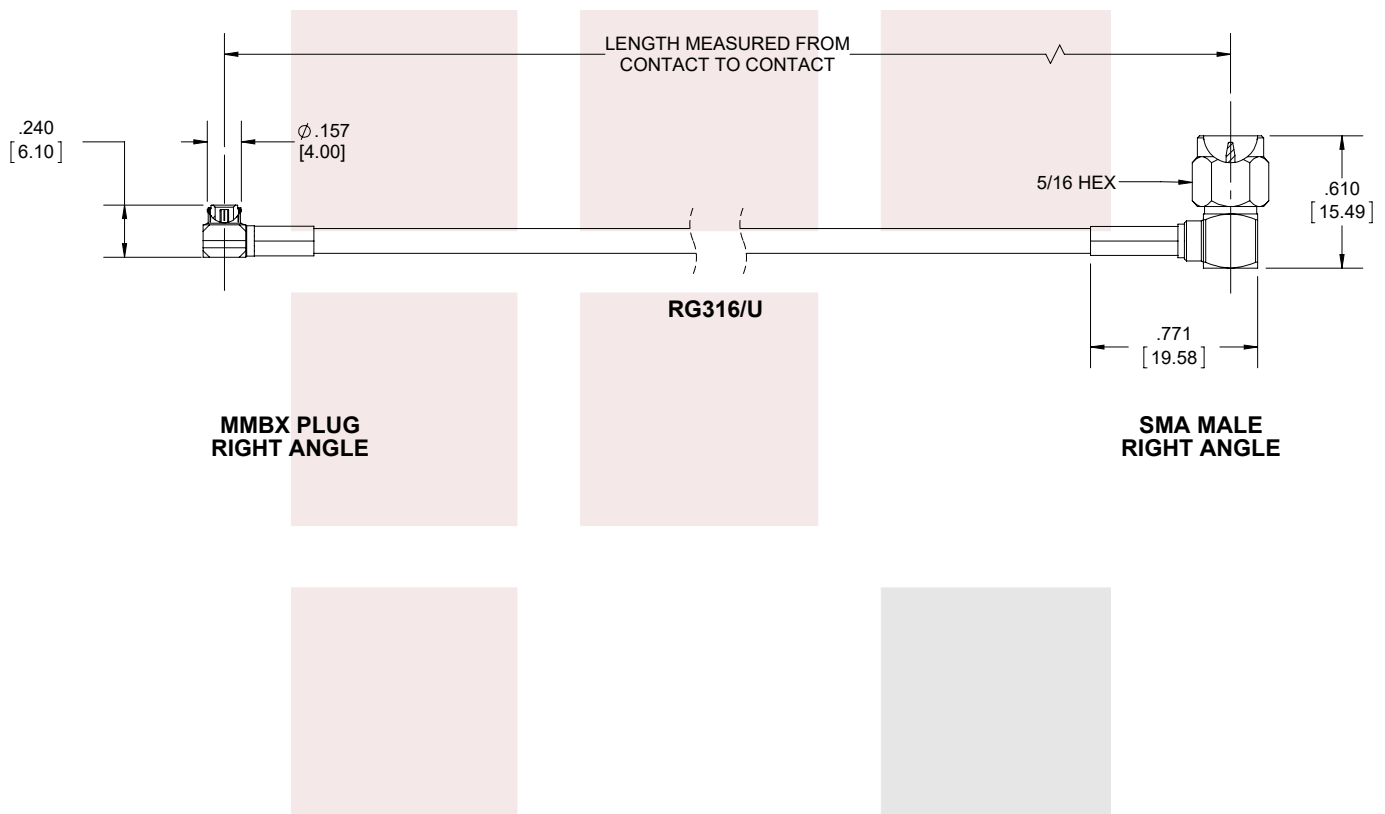
Snap-On RA MMBX Plug to RA SMA Male Cable RG316 Coax in 12 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Snap-On RA MMBX Plug to RA SMA Male Cable RG316 Coax in 12 Inch FMCA1428-12](#)

URL: <https://www.fairviewmicrowave.com/ra-mmbx-plug-ra-sma-male-cable-rg316u-coax-fmca1428-12-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

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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

Snap-On RA MMBX Plug to RA SMA Male Cable RG316  
Coax in 12 Inch

DWG NO

FMCA1428

CAGE CODE

3FKR5

CAD FILE 062217

SHEET 1 OF 1

SCALE N/A

SIZE A

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