

## RA QMA Male to QMA Female Bulkhead Cable Tinned Aluminum RG402 Type .141 Coax in 48 Inch

The RA QMA male to QMA female bulkhead cable using Tinned Aluminum RG402 type .141 coax, part number FMCA2844-48, from Fairview Microwave is in-stock and ships same day. This Fairview QMA to QMA cable assembly has a male to female gender configuration with 50 ohm semi-rigid FM-SR141ALTN-STR coax. Fairview Microwave's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. The FMCA2844-48 QMA male to QMA female cable assembly operates to 18 GHz. The right angle QMA interface on the FM-SR141ALTN-STR cable allows for easier connections in tight spaces. Our RF cable assembly with QMA 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  |      | 18    | GHz   |
| VSWR                    |     |      | 1.5:1 |       |
| Velocity of Propagation |     | 69.5 |       | %     |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 1    | 2    | 4.5  | 9    | 18   | GHz   |
| Insertion Loss (Typ.) | 0.82 | 0.97 | 1.34 | 2.1  | 2.94 | dB/ft |
|                       | 2.69 | 3.18 | 4.4  | 6.89 | 9.65 | dB/m  |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

|         |                    |
|---------|--------------------|
| Length* | 48 in [121.92 cm]  |
| Weight  | 0.028 lbs [12.7 g] |

#### Cable

|                                      |                           |
|--------------------------------------|---------------------------|
| Cable Type                           | FM-SR141ALTN-STR          |
| Impedance                            | 50 Ohms                   |
| Inner Conductor Type                 | Solid                     |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |



### Configuration:

- QMA Male Right Angle
- QMA Female Bulkhead
- FM-SR141ALTN-STR

### Features:

- Max Frequency 18 GHz
- 69.5% Phase Velocity
- 100 Mating Cycles

### Applications:

- General Purpose
- Laboratory Use

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|                                      |                   |
|--------------------------------------|-------------------|
| Dielectric Type                      | PTFE              |
| Number of Shields                    | 1                 |
| Outer Conductor Material and Plating | Tinned Aluminum   |
| Repeated Minimum Bend Radius         | 0.15 in [3.81 mm] |

**Connectors**

| Description                   | Connector 1              | Connector 2            |
|-------------------------------|--------------------------|------------------------|
| Type                          | QMA Male                 | QMA Female             |
| Mount Method                  |                          | Bulkhead               |
| Impedance                     | 50 Ohms                  | 50 Ohms                |
| Mating Cycles                 | 100                      | 100                    |
| Contact Material & Plating    | Brass, Gold over Nickel  | Beryllium Copper, Gold |
| Contact Plating Spec.         | 0.15 µm minimum          |                        |
| Dielectric Type               | PTFE                     | PTFE                   |
| Outer Cond Material & Plating | Spring Bronze, Tri-Metal | Brass, Gold            |
| Body Material & Plating       | Brass, Gold              | Brass, Gold            |
| Body Plating Spec.            | 0.15 µm minimum          |                        |

**Environmental Specifications**
**Temperature**

Operating Range -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA2844 - xx uu**

 cm = Centimeters  
 <blank> = Inches  
 Length

 Example: FMCA2844-12 = 12 inches long cable  
 FMCA2844-100cm = 100 cm long cable

RA QMA Male to QMA Female Bulkhead Cable Tinned Aluminum RG402 Type .141 Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

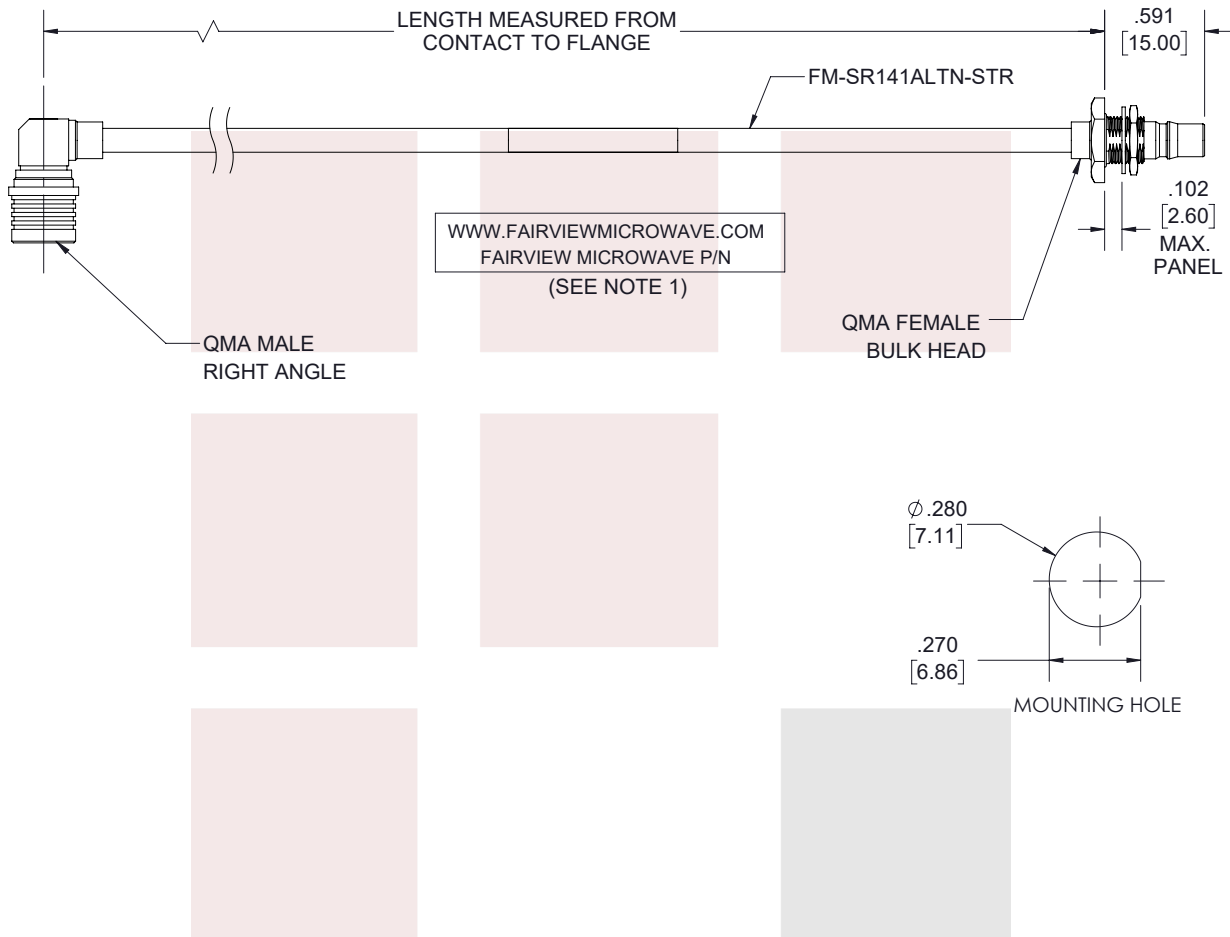
Click the following link to obtain additional part information: [RA QMA Male to QMA Female Bulkhead Cable Tinned Aluminum RG402 Type .141 Coax in 48 Inch FMCA2844-48](#)

URL: <https://www.fairviewmicrowave.com/ra-qma-male-to-qma-female-bulkhead-cable-tinned-aluminum-rg402-type-.141-coax-fmca2844-48-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.



| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 07/18/2022 | AGANWANI |



**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END  
6.0" FROM THE FRONT OF THE CONNECTOR.

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TITLE  
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

| TOLERANCES:          |                  | CABLE LENGTH (L) TOLERANCES:                |  |
|----------------------|------------------|---|--|
| .X = ± 2 [ .08]      | FRACTIONS ± 1/32 | L ≤ 12 [305] = +1 [25] / -0                 |  |
| .XX = ± .02 [ .51]   | ANGLES ± 1°      | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0     |  |
| .XXX = ± .005 [ .13] |                  | 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  |  |
|                      |                  | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 |  |
|                      |                  | 300 [7620] < L = +5%L / -0                  |  |

THIRD-ANGLE PROJECTION  
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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

|        |                 |                    |                   |       |
|--------|-----------------|--------------------|-------------------|-------|
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY PSRINIVAS | ITEM NO. FMCA2844 | REV A |
|--------|-----------------|--------------------|-------------------|-------|

T-Rev.D