

RA SMA Male to SMA Female Bulkhead Cable FM-SR086TB Coax in 18 Inch

The RA SMA male to SMA female bulkhead 18 inch cable using FM-SR086TB coax, part number FMCA2107-18, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female gender configuration with 50 ohm formable FM-SR086TB coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA2107-18 SMA male to SMA female cable assembly operates to 10 GHz. The right angle SMA interface on the FM-SR086TB cable allows for easier connections in tight spaces. Our RF cable assembly with SMA 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 | | 10 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 69.5 | | % |
| Capacitance | | 29 [95.14] | | pF/ft [pF/m] |
| DC Resistance Inner Conductor | | 65.7 [215.55] | | Ω /1000ft [Ω /Km] |
| DC Resistance Outer Conductor | | 10.2 [33.46] | | Ω /1000ft [Ω /Km] |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.5 | 1 | 2.5 | 5 | 10 | GHz |
| Insertion Loss (Typ.) | 0.53 | 0.64 | 0.82 | 1.12 | 1.52 | dB |

Electrical Specification Notes:

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* 18 in [457.2 mm]
 Diameter 0.433 in [11 mm]

Cable

Cable Type FM-SR086TB
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE



Configuration:

- SMA Male Right Angle
- SMA Female Bulkhead
- FM-SR086TB

Features:

- Max Frequency 10 GHz
- 69.5% Phase Velocity
- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- Cable may be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- High RF Shielding > 100 dB
- 100% Hi-pot and continuity tested
- 100% VSWR tested to max frequency of assembly
- Standard and custom lengths ship the same day

Applications:

- General Purpose
- Laboratory Use

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Outer Conductor Material and Plating Tinned Copper Composite Braid
 Repeated Minimum Bend Radius 0.78 in [19.81 mm]

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------|----------------------------|------------------------------------|
| Type | SMA Male | SMA Female |
| Mount Method | | Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Brass, Gold over Nickel | Beryllium Copper, Gold over Nickel |
| Contact Plating Spec. | 0.2 µin minimum | |
| Dielectric Type | PTFE | PTFE |
| Body Material & Plating | Brass, Gold over Nickel | Brass, Gold over Nickel |
| Body Plating Spec. | 0.1 µin minimum | |
| Coupling Nut Material & Plating | Passivated Stainless Steel | |
| Hex Size | 5/16 inch | |
| Torque | 8 in-lbs 0.9 Nm | |

Mechanical Specification Notes:

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

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMCA2107 - xx uu

 cm = Centimeters
 <blank> = Inches

Length

Example: FMCA2107-12 = 12 inches long cable
 FMCA2107-100cm = 100 cm long cable

RA SMA Male to SMA Female Bulkhead Cable FM-SR086TB Coax in 18 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.

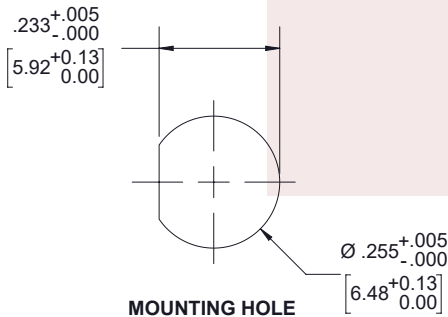
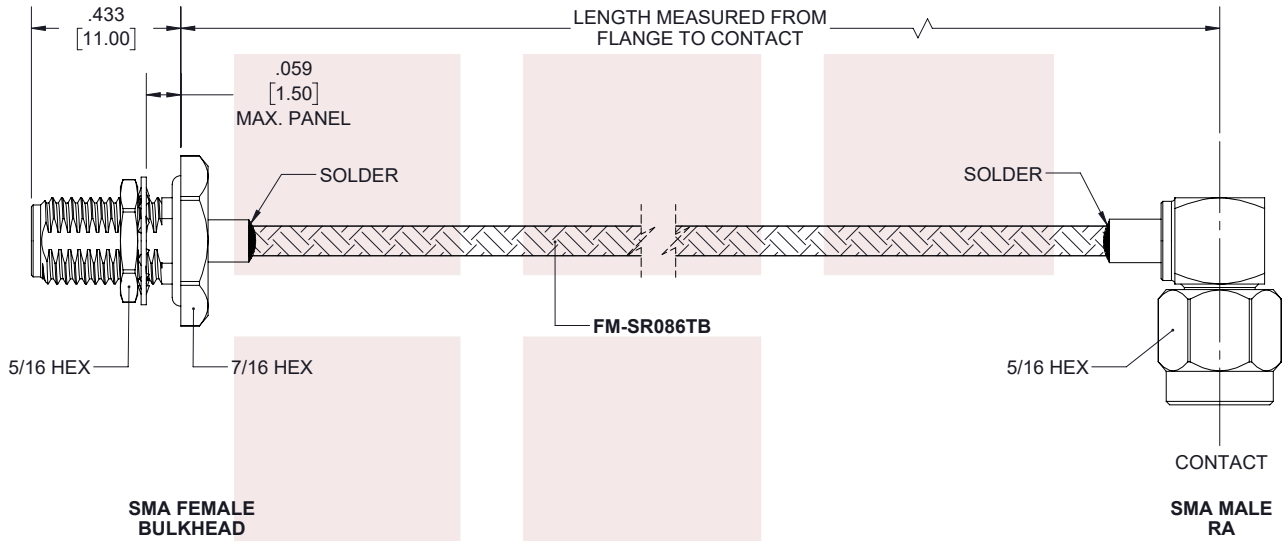
Click the following link to obtain additional part information: [RA SMA Male to SMA Female Bulkhead Cable FM-SR086TB Coax in 18 Inch FMCA2107-18](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-sma-female-cable-fm-sr086tb-coax-fmca2107-18-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 | 11/25/19 | S.ELLIS |



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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 [5.08] | FRACTIONS ± 1/32 | L ≤ 12 [305] = +1 [25] / -0 | |
| .XX = ±.02 [.51] | | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | |
| .XXX = ±.005 [.13] | ANGLES ± 1° | 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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|--|-----------|----------|-------------|-----|-------|-----|
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | | | | | SCALE | N/A |
| SIZE | CAGE CODE | DRAWN BY | PART NUMBER | REV | | |
| A | 3FKR5 | K.DANG | FMCA2107 | A | | |

T-Rev.D