

## SSMC Plug to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax in 6 Inch

Fairview Microwave's SSMC cable assemblies are part of our full line of RF interconnects available for same-day shipping. These SSMC cable assemblies are designed for test applications or connection of your SSMC system components. With a high frequency range up to 12.4 GHz, this family of SSMC cables can also be used to connect your data acquisition system or SSMC connections on your A/D converters. There are hundreds of possible cable assembly configurations to choose from, all available same day.

This SSMC cable assembly datasheet PDF contains specifications, CAD drawing and dimensions that are shown below. Fairview Microwave not only has many SSMC 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 low loss SSMC I/O for digital receivers 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  |               | 12.4  | GHz                             |
| VSWR                          |     |               | 1.4:1 |                                 |
| 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] |       | $\Omega/1000ft$ [ $\Omega/Km$ ] |
| DC Resistance Outer Conductor |     | 10.2 [33.46]  |       | $\Omega/1000ft$ [ $\Omega/Km$ ] |
| Operating Voltage (AC)        |     |               | 250   | Vrms                            |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.5  | 1    | 5    | 10   | 12.4 | GHz   |
| Insertion Loss (Max.) | 0.28 | 0.32 | 0.48 | 0.61 | 0.66 | dB    |

### Mechanical Specifications

#### Cable Assembly

Length\* 6 in [152.4 mm]  
Diameter 0.156 in [3.96 mm]

#### Cable

Cable Type FM-SR086TBJ  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper Clad Steel, Silver  
Dielectric Type PTFE  
Number of Shields 1  
Outer Conductor Material and Plating Tinned Copper Composite Braid



### Configuration:

- SSMC Plug
- SSMC Jack Bulkhead
- FM-SR086TBJ

### Features:

- Reliable threaded SSMC cable connection
- Max. Operating Frequency of 12.4 GHz
- Small form factor (SSMC connection is 50% smaller than SMA)
- In stock and ready to ship

### Applications:

- Software Defined Radio (SDR)
- Data acquisition systems with SSMC connections
- Digital Wideband Receivers
- SSMC patch panels
- A/D Conversion

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Jacket Material FEP, Black  
 Jacket Diameter 0.105 in [2.67 mm]  
 One Time Minimum Bend Radius 0.5 in [12.7 mm]  
 Repeated Minimum Bend Radius 0.787 in [19.99 mm]

**Connectors**

| Description                     | Connector 1            | Connector 2            |
|---------------------------------|------------------------|------------------------|
| Type                            | SSMC Plug              | SSMC Jack              |
| Mount Method                    |                        | Bulkhead               |
| Impedance                       | 50 Ohms                | 50 Ohms                |
| Mating Cycles                   | 500                    | 500                    |
| Contact Material & Plating      | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Spec.           | MIL-G-45204            | MIL-G-45204            |
| Dielectric Type                 | Teflon                 | Teflon                 |
| Outer Cond Material & Plating   |                        | Beryllium Copper, Gold |
| Outer Cond Plating Spec.        |                        | MIL-G-45204            |
| Body Material & Plating         | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Plating Spec.              | MIL-G-45204            | MIL-G-45204            |
| Coupling Nut Material & Plating | Beryllium Copper, Gold |                        |
| Coupling Nut Plating Spec.      | MIL-G-45204            |                        |
| Torque                          | 1.75 in-lbs [0.2 Nm]   | 1.75 in-lbs [0.2 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)

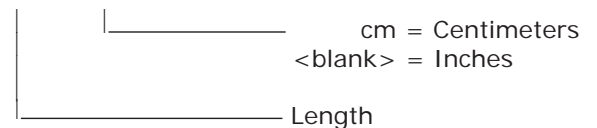
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA1505 - xx uu**



Example: FMCA1505-12 = 12 inches long cable  
 FMCA1505-100cm = 100 cm long cable

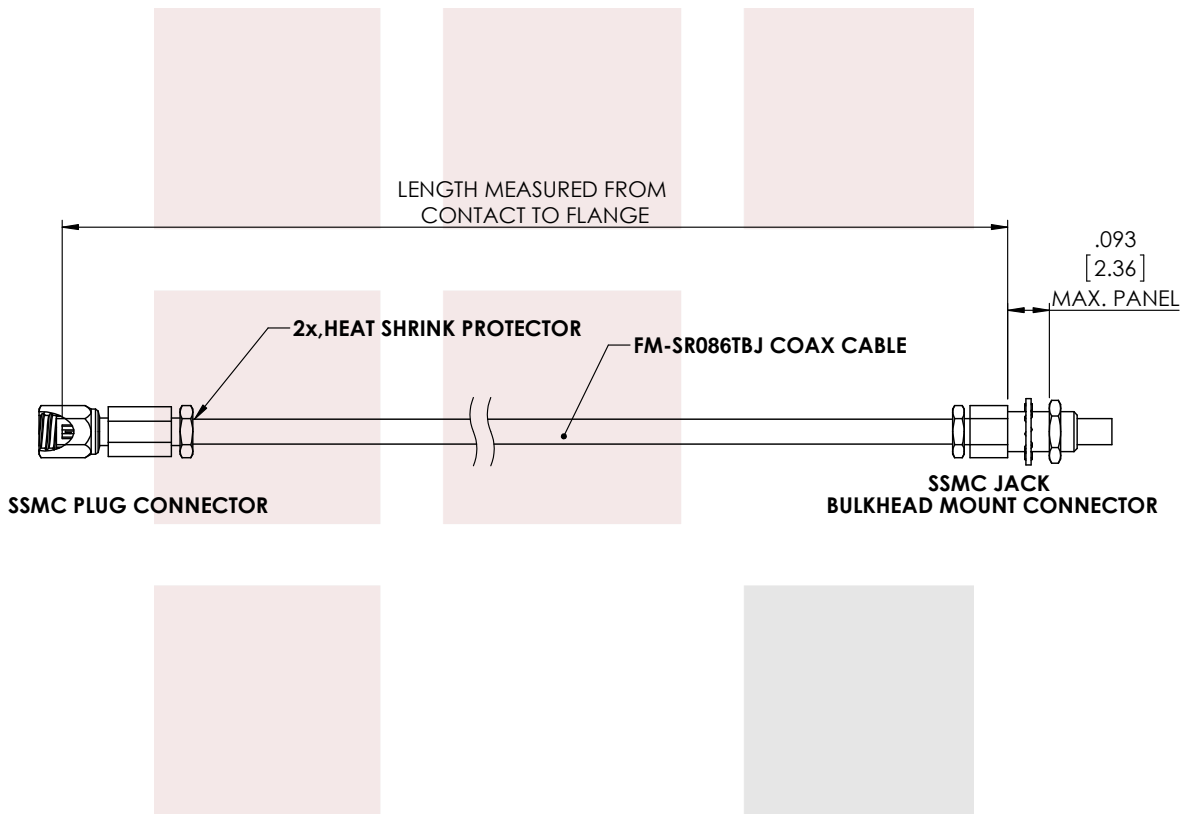
SSMC Plug to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax in 6 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SSMC Plug to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax in 6 Inch FMCA1505-6](#)

URL: <https://www.fairviewmicrowave.com/ssmc-plug-ssmc-jack-cable-rg405-type-.086-coax-fmca1505-6-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

|   |            |   |       |                    |               |
|---|------------|---|-------|--------------------|---------------|
| <b>FAIRVIEW MICROWAVE INC.</b><br>ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM |            | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |       |                    |               |
| TITLE<br>SSMC Plug to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax in 6 Inch   |            | DWG NO<br>FMCA1505  |       | CAGE CODE<br>3FKR5 |               |
| CAD FILE  | 11/08/2017 | SHEET   | SCALE | N/A                | SIZE A CN2245 |