

**SMA Female Bulkhead to SSMC Jack Bulkhead Cable**  
**FM-SR086TBJ Coax**

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			1.5:1	
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]		$\Omega/1000ft$ [ $\Omega/Km$ ]

**Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	5	10	12.4	GHz
Insertion Loss (Max.)	0.15	0.23	0.55	0.81	0.91	dB/ft
	0.49	0.75	1.8	2.66	2.99	dB/m
						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 0.433 in [11 mm]

**Cable**

Cable Type FM-SR086TBJ  
Impedance 50 Ohms  
Inner Conductor Type Solid



**Configuration:**

- SMA Female Bulkhead
- 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

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
www.fairviewmicrowave.com  
sales@fairviewmicrowave.com

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
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	SMA Female	SSMC Jack
Mount Method	Bulkhead	Bulkhead
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold
Contact Plating Spec.		MIL-G-45204
Dielectric Type	PTFE	Teflon
Outer Cond Material & Plating		Beryllium Copper, Gold
Outer Cond Plating Spec.		MIL-G-45204
Body Material & Plating	Brass, Gold over Nickel	Beryllium Copper, Gold
Body Plating Spec.		MIL-G-45204
Torque		1.75 in-lbs [0.2 Nm]

Mechanical Specification Notes:

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

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

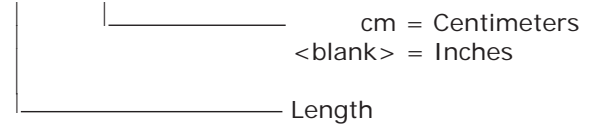
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA1516 - xx uu**



Example: FMCA1516-12 = 12 inches long cable  
 FMCA1516-100cm = 100 cm long cable

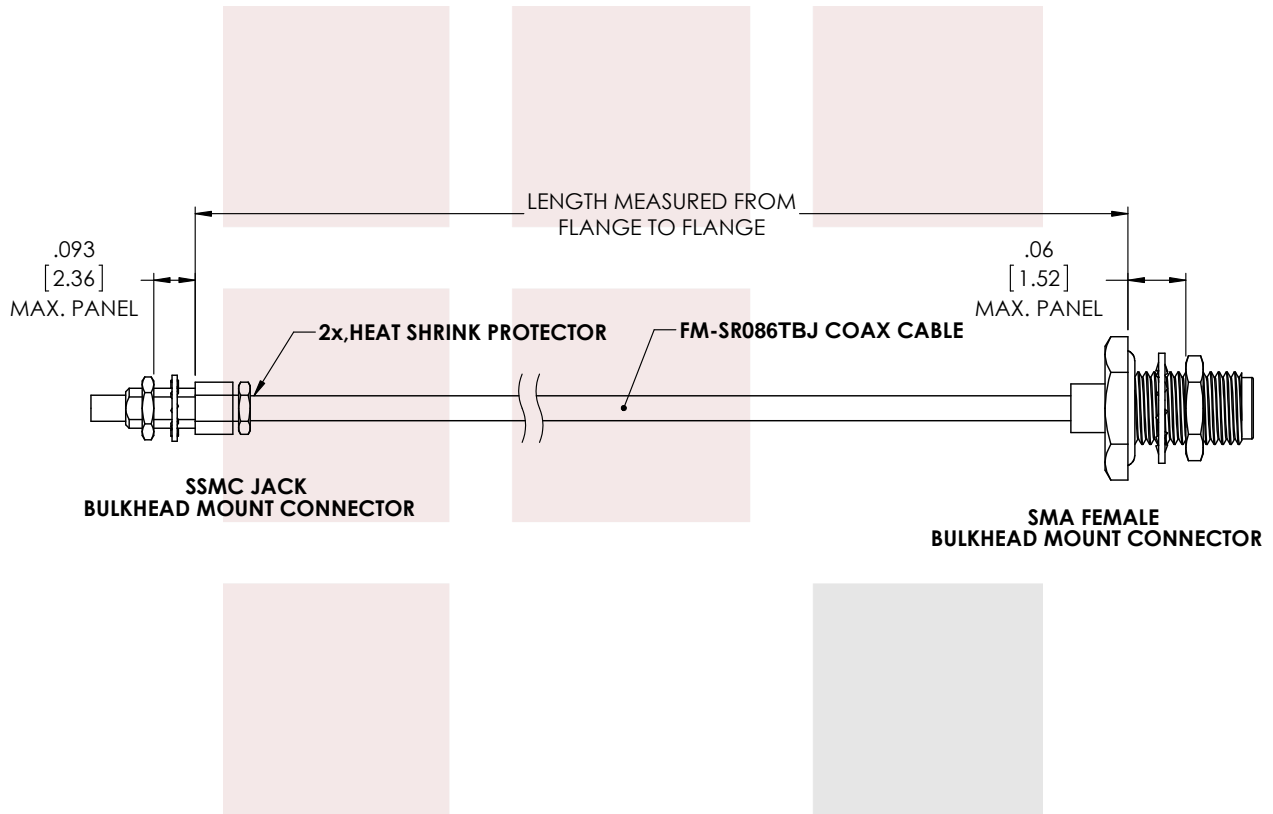
SMA Female Bulkhead to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Female Bulkhead to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax FMCA1516](#)

URL: <https://www.fairviewmicrowave.com/sma-female-ssmc-jack-cable-rg405-type-.086-coax-fmca1516-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> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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 SMA Female Bulkhead to SSMC Jack Bulkhead Cable FM-SR086TBJ Coax		DWG NO FMCA1516		CAGE CODE 3FKR5	
CAD FILE	11/08/2017	SHEET	SCALE	N/A	SIZE A CN2245