

SMA Male to RA SSMC Plug Cable FM-SR086TBJ Coax

The SMA male to RA SSMC plug cable using FM-SR086TBJ coax, part number FMCA1509, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SSMC cable assembly has a male to plug gender configuration with 50 ohm formable FM-SR086TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA1509 SMA male to SSMC plug cable assembly operates to 12.4 GHz. The right angle SSMC interface on the FM-SR086TBJ cable allows for easier connections in tight spaces.

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		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]		$\Omega/1000ft$ [Ω/Km]
DC Resistance Outer Conductor		10.2 [33.46]		$\Omega/1000ft$ [Ω/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

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	0.315 in [8 mm]
Weight	0.045 lbs [20.41 g]

Cable

Cable Type	FM-SR086TBJ
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver



Configuration:

- SMA Male
- SSMC Plug Right Angle
- FM-SR086TBJ

Features:

- Max Frequency 12.4 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket
- Reliable threaded SSMC cable connection
- Small form factor (SSMC connection is 50% smaller than SMA)
- In stock and ready to ship

Applications:

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

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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 Male	SSMC Plug
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Brass, Gold over Nickel	Beryllium Copper, Gold
Contact Plating Spec.		MIL-G-45204
Dielectric Type	PTFE	Teflon
Body Material & Plating	Brass, Gold over Nickel	Brass, Gold
Body Plating Spec.		MIL-G-45204
Coupling Nut Material & Plating	Passivated Stainless Steel	Beryllium Copper, Gold
Coupling Nut Plating Spec.		MIL-G-45204
Hex Size	5/16 inch	
Torque	8 in-lbs 0.9 Nm	1.75 in-lbs 0.2 Nm

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA1509 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMCA1509-12 = 12 inches long cable
 FMCA1509-100cm = 100 cm long cable

SMA Male to RA SSMC Plug 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.

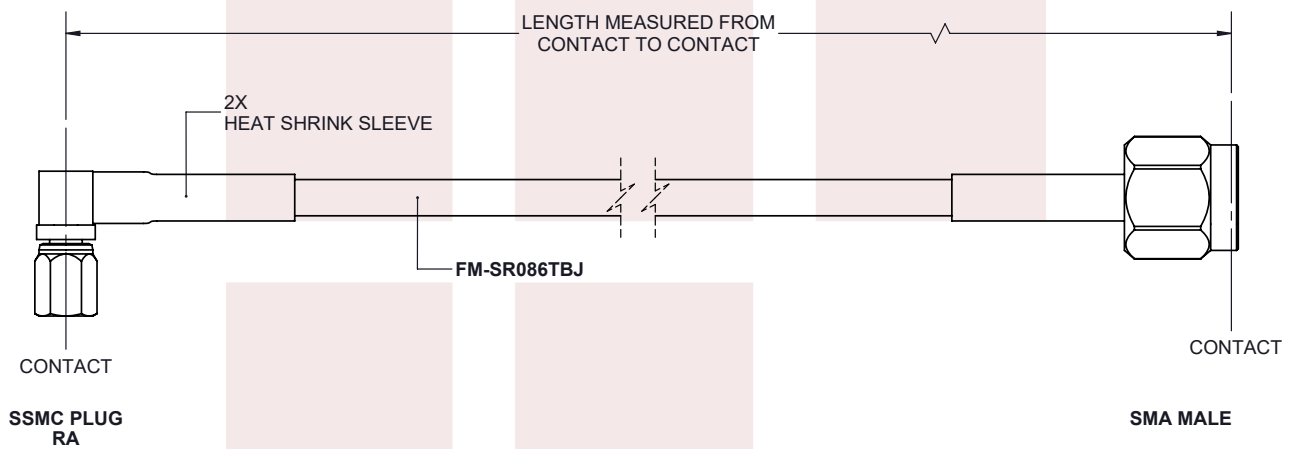
Click the following link to obtain additional part information: [SMA Male to RA SSMC Plug Cable FM-SR086TBJ Coax FMCA1509](#)

URL: <https://www.fairviewmicrowave.com/sma-male-ra-ssmc-plug-cable-rg405-type-.086-coax-fmca1509-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	PCR FMCA1509	1/12/2021	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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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE
N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMCA1509	REV A
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