

SMP Female to RA SMP Female Cable FM-SR086TB Coax in 48 Inch

The SMP female to RA SMP female 48 inch cable using FM-SR086TB coax, part number FMC00649-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to SMP cable assembly has a female 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 FMC00649-48 SMP female to SMP female cable assembly operates to 18 GHz. The right angle SMP interface on the FM-SR086TB 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		18	GHz
VSWR			1.5:1	
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	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	1.2	1.53	2.34	3.34	4.79	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax 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	0.09 lbs [40.82 g]

Cable

Cable Type	FM-SR086TB
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1



Configuration:

- SMP Female
- SMP Female Right Angle
- FM-SR086TB

Features:

- Max Frequency 18 GHz
- 69.5% Phase Velocity

Applications:

- General Purpose
- Laboratory Use

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

Outer Conductor Material and Plating Copper, Tin

Repeated Minimum Bend Radius 0.78 in [19.81 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female	SMP Female
Specification	MIL-STD-348A	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	30 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Outer Cond Plating Spec.	3 µin minimum	MIL-G-45204

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00649 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMC00649-12 = 12 inches long cable
 FMC00649-100cm = 100 cm long cable

SMP Female to RA SMP Female Cable FM-SR086TB 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: [SMP Female to RA SMP Female Cable FM-SR086TB Coax in 48 Inch FMC00649-48](#)

URL: <https://www.fairviewmicrowave.com/smp-female-to-ra-smp-female-cable-fm-sr086tb-coax-fmc00649-48-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	08/10/2022	AGANWANI	

LENGTH MEASURED FROM CONTACT TO CONTACT

2X HEATSHRINK

FM-SR086TB

SMP FEMALE CONNECTOR

SMP FEMALE RIGHT ANGLE CONNECTOR

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

Fairview Microwave an INFINITE brand TITLE SMP Female to RA SMP Female Cable FM-SR086TB Coax in 48 Inch		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: .X = ±.2 [.51] .XX = ±.02 [.51] .XXX = ±.005 [.13] FRACTIONS ± 1/32 ANGLES ± 1° CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 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 THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED. SHEET 1 OF 1 SCALE N/A		SIZE A CAGE CODE 3FKR5 DRAWN BY BPUCHASKI ITEM NO. FMC00649 REV A	
---	--	--	--	--	--

T-Rev.D