

## RA SMP Female to Mini SMP Female Cable FM-SR086TB Coax

The RA SMP female to Mini SMP female cable using FM-SR086TB coax, part number FMC00647/0002, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to Mini 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 FMC00647/0002 SMP female to Mini 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.



### Configuration:

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

### Features:

- Max Frequency 18 GHz
- 69.5% Phase Velocity

### Applications:

- General Purpose
- Laboratory Use

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	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]		$\Omega$ /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	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.225	0.306	0.508	0.759	1.122	dB/ft
	0.74	1	1.67	2.49	3.68	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the Mini SMP connector and 0.2 dB for the SMP connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.034 lbs [15.42 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  
 Outer Conductor Material and Plating Copper, Tin

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Repeated Minimum Bend Radius                      0.78 in [19.81 mm]

**Connectors**

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

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00647/0002 - xx uu**

 cm = Centimeters  
 <blank> = Inches  
 Length

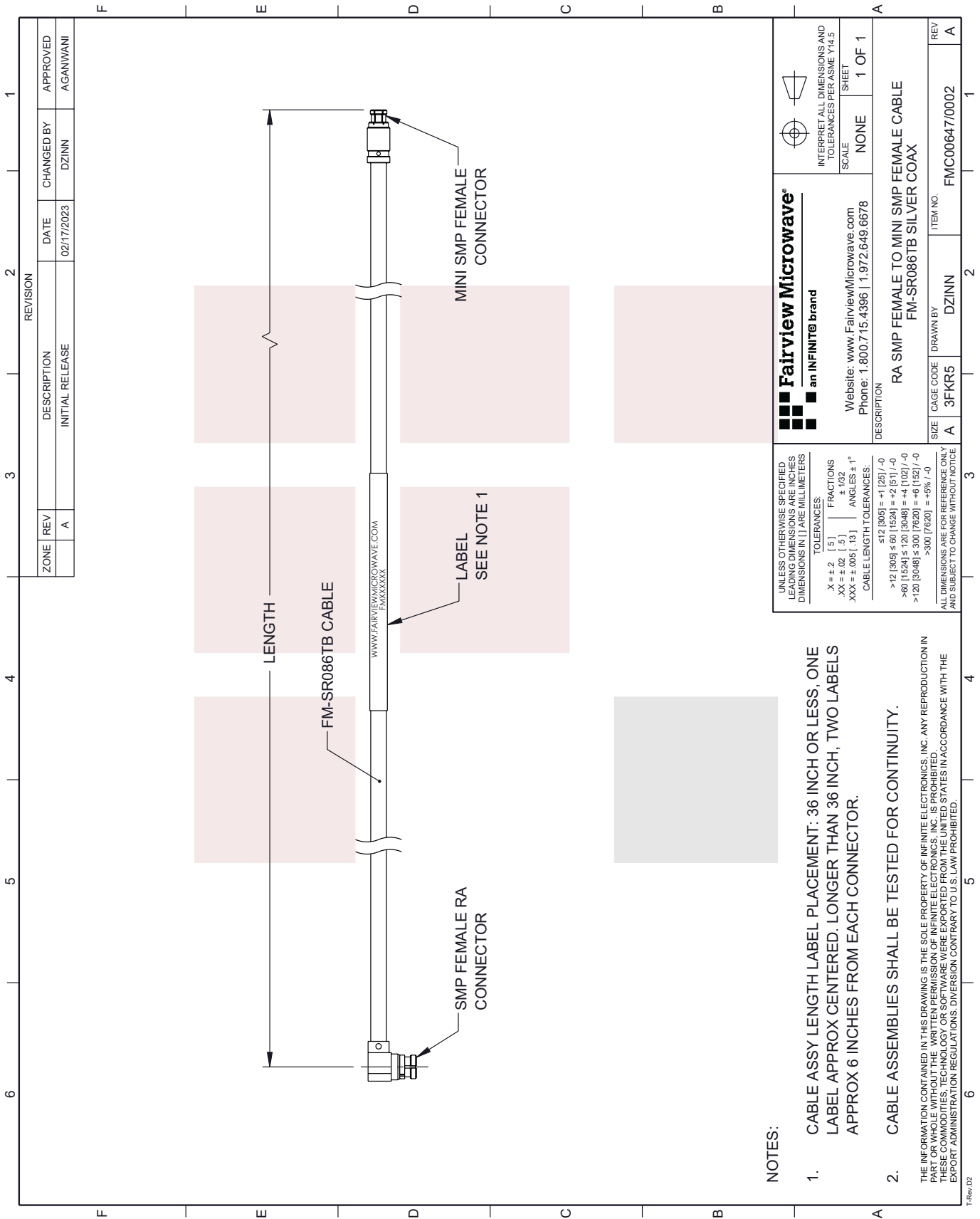
 Example: FMC00647/0002-12 = 12 inches long cable  
 FMC00647/0002-100cm = 100 cm long cable

RA SMP Female to Mini SMP Female Cable FM-SR086TB Coax 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: [RA SMP Female to Mini SMP Female Cable FM-SR086TB Coax FMC00647/0002](#)

 URL: <https://www.fairviewmicrowave.com/ra-smp-female-to-mini-smp-female-cable-fm-sr086tb-coax-fmc00647-0002-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.



ZONE		REVISION		DATE		CHANGED BY		APPROVED	
A		INITIAL RELEASE		02/17/2023	DZINN		AGANWANI		

<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SHEET</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>	
<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:  .X = ±.2 [ .5 ] FRACTIONS  .XX = ±.02 [ .5 ] ±.132  .XXX = ±.005 [ .13 ] ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:  512 [305] = +1 [25] / -0  &gt;12 [305] ≤ 60 [1524] = +2 [51] / -0  &gt;60 [1524] ≤ 120 [3048] = +4 [102] / -0  &gt;120 [3048] ≤ 300 [7620] = +6 [152] / -0  &gt;300 [7620] = +5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE</p>			
DESCRIPTION	RA SMP FEMALE TO MINI SMP FEMALE CABLE FM-SR086TB SIL VER COAX	ITEM NO.	FMC00647/0002
SIZE	A	CAGE CODE	3FKR5
DRAWN BY	DZINN	REV	A

- NOTES:**
- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
  - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
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