

## RA SMA Male to RA SMP Female Cable FM-F086 Coax, 270 Degree Clocking

### FMC0421085/SP1

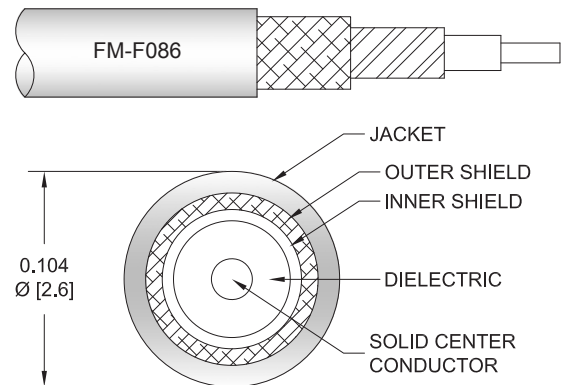


#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMP Female Right Angle
- Cable Type: FM-F086
- Coax Flex Type: Flexible

#### Features

- Max Frequency 12.4 GHz
- Shielding Effectivity > 110 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

The RA SMA male to RA SMP female cable using FM-F086 coax, part number FMC0421085/SP1, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMP cable assembly has a male to female gender configuration with 50 ohm flexible FM-F086 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC0421085/SP1 SMA male to SMP female cable assembly operates to 12.4 GHz. The right angle SMA and right angle SMP interfaces on the FM-F086 cable allow for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 110 dB.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	110			dB
Capacitance		95 [311.68]		pF/ft [pF/m]

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2.5	5	12.4		GHz

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**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Insertion Loss (Typ.)	0.23	0.353	0.52	0.89		dB/ft
	0.75	1.16	1.71	2.92		dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.04 lbs [18.14 g]

**Cable**

Cable Type	FM-F086
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.104 in [2.64 mm]
Repeated Minimum Bend Radius	0.5 in [12.7 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMP Female Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50µ in. minimum	MIL-G-45204
Dielectric Type	Teflon	PTFE
Body Material and Plating	Stainless Steel, Gold	Beryllium Copper, Gold
Body Plating Specification	3µ in. minimum	MIL-G-45204
Hex Size	5/16 inch	
Torque	8.5 in-lbs 0.96 Nm	

**Environmental Specifications**

Operating Range Temperature	-55 to +125 deg C
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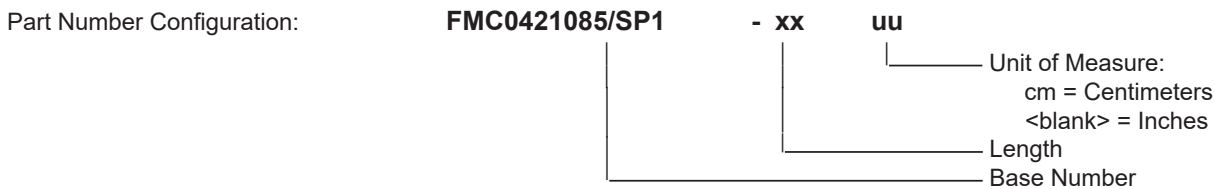
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**

**How to Order**



Example: FMC0421085/SP1-12 = 12 inches long cable  
FMC0421085/SP1-100cm = 100 cm long cable

RA SMA Male to RA SMP Female Cable FM-F086 Coax, 270 Degree Clocking from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

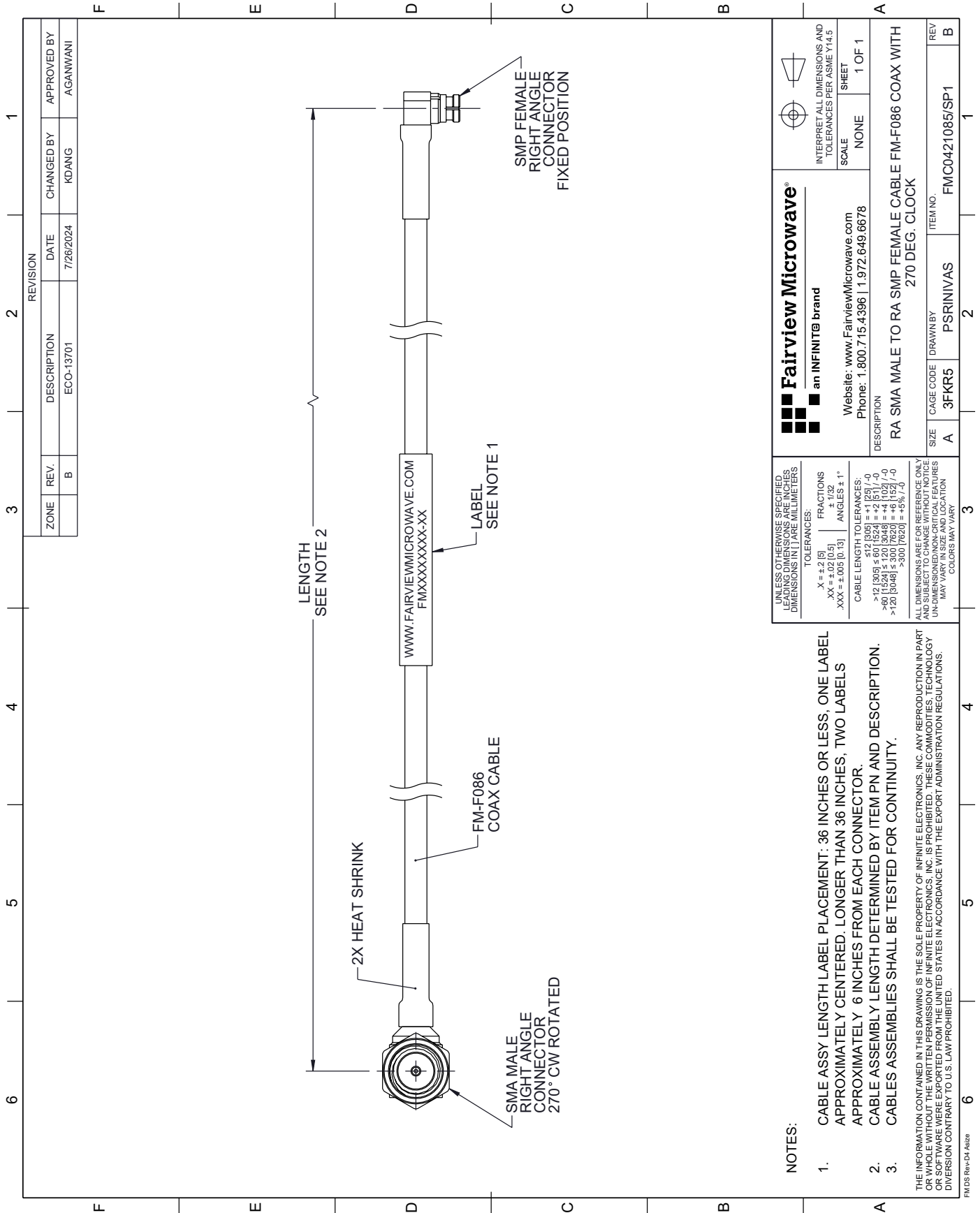
For additional information on this product, please click the following link: [RA SMA Male to RA SMP Female Cable FM-F086 Coax, 270 Degree Clocking FMC0421085/SP1](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-to-ra-smp-female-cable-fm-f086-coax-270-degree-clocking-fmc0421085-sp1-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

# FMC0421085/SP1 CAD Drawing

RA SMA Male to RA SMP Female Cable FM-F086 Coax, 270 Degree Clocking



<b>Fairview Microwave®</b> an INFINIT® brand Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN PAREMILLIMETERS TOLERANCES: X = ±.2 [5]      FRACTIONS ± 1/32 .XX = ±.02 [0.5]      ANGLES ± 1° .XXX = ±.005 [0.13]		RA SMA MALE TO RA SMP FEMALE CABLE FM-F086 COAX WITH 270 DEG. CLOCK ITEM NO. FMC0421085/SP1	
CABLE LENGTH TOLERANCES: >12 (305) ≤ 60 (1524) = +1 (25) / -0 >60 (1524) ≤ 120 (3048) = +4 (102) / -0 >120 (3048) ≤ 300 (7620) = +5 (127) / -0 >300 (7620) = +5 (127) / -0		SIZE: A      CAGE CODE: 3FKR5      DRAWN BY: PSRINIVAS DESCRIPTION: RA SMA MALE TO RA SMP FEMALE CABLE FM-F086 COAX WITH 270 DEG. CLOCK	
ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. DIMENSIONS ON CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		REV: B      APPROVED BY: AGANWANI DATE: 7/26/2024      CHANGED BY: KDANG	
NOTES: 1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR. 2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION. 3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.		REV: B      APPROVED BY: AGANWANI DATE: 7/26/2024      CHANGED BY: KDANG	