

## Mini SMP Female to RA MMCX Plug Cable FM-F086 Coax

The Mini SMP female to RA MMCX plug cable using FM-F086 coax, part number FMCA2221, from Fairview Microwave is in-stock and ships same day. This Fairview Mini SMP to MMCX cable assembly has a female to plug 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 FMCA2221 Mini SMP female to MMCX plug cable assembly operates to 6 GHz. The right angle MMCX interface on the FM-F086 cable allows 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	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.5:1	
Velocity of Propagation		70		%
RF Shielding	110			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.4	1	2.5	5	6	GHz
Insertion Loss (Typ.)	0.13	0.21	0.34	0.5	0.55	dB/ft
	0.43	0.69	1.12	1.64	1.8	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 straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.157 lbs [71.21 g]

#### Cable

Cable Type FM-F086  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 2  
 Shield Layer 1 Silver Plated Copper Tape  
 Shield Layer 2 Silver Plated Copper Braid



### Configuration:

- Mini SMP Female
- MMCX Plug Right Angle
- FM-F086

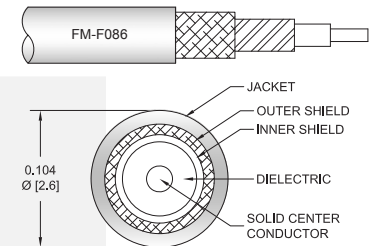
### Features:

- Max Frequency 6 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

### Applications:

- General Purpose
- Laboratory Use

### Cable Diagram:



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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	Mini SMP Female	MMCX Plug
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, GoldPhosphor Bronze, Gold over Nickel	
Contact Plating Spec.	MIL-G-45204	
Dielectric Type	PTFE	PTFE
Body Material & Plating	Beryllium Copper, Gold	Brass, Gold over Nickel
Body Plating Spec.	MIL-G-45204	

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

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**FMCA2221 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

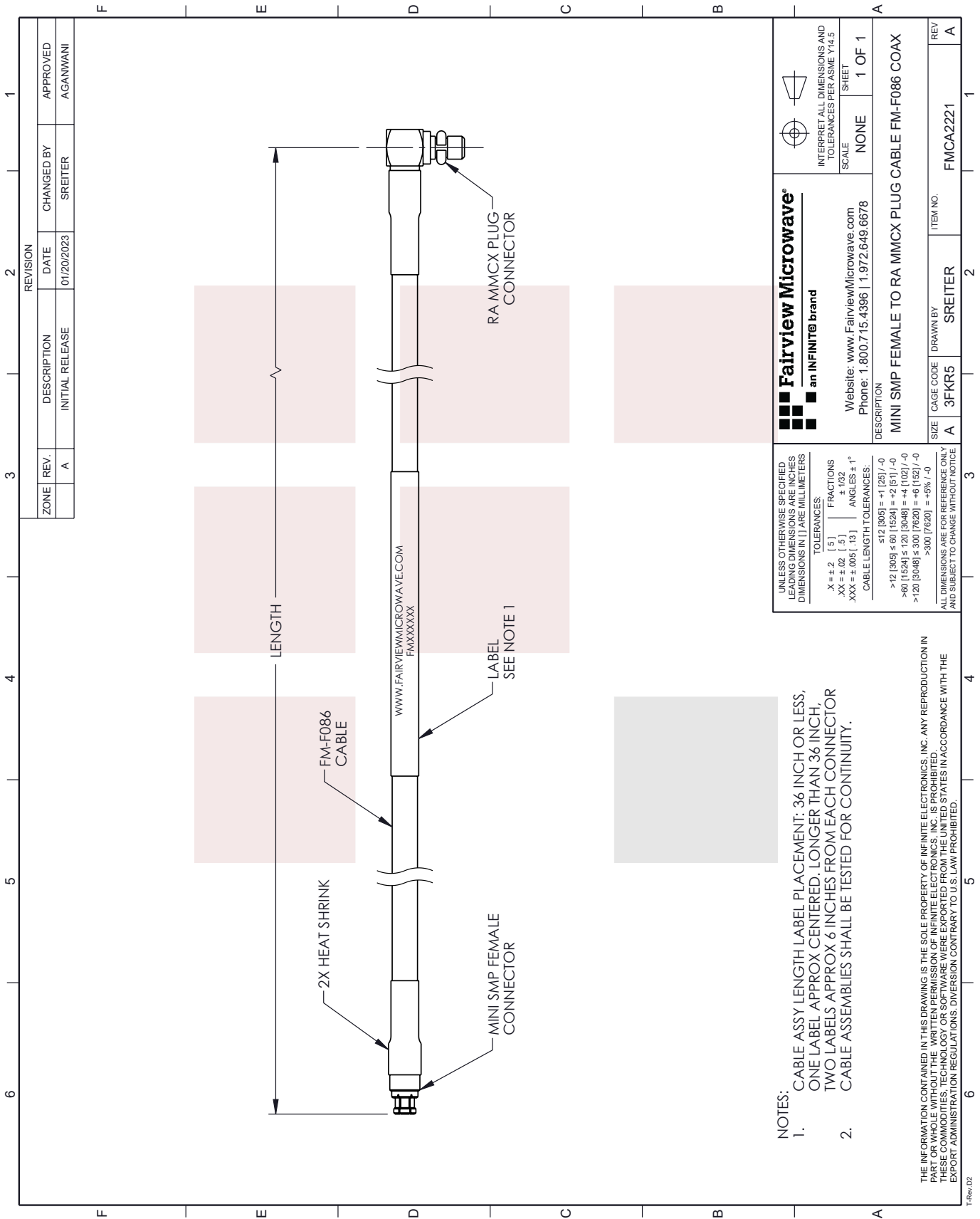
Example: FMCA2221-12 = 12 inches long cable  
 FMCA2221-100cm = 100 cm long cable

Mini SMP Female to RA MMCX Plug Cable FM-F086 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: [Mini SMP Female to RA MMCX Plug Cable FM-F086 Coax FMCA2221](#)

URL: <https://www.fairviewmicrowave.com/mini-smp-female-to-ra-mmcx-plug-cable-fm-f086-coax-fmca2221-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.



**NOTES:**

1. 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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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	TOLERANCES: .X = ±.2 [ .5 ] .XX = ±.02 [ .5 ] .XXX = ±.005 [ .13 ]	FRACTIONS ±.132 ANGLES ± 1°	CABLE LENGTH TOLERANCES: .512 [ .905 ] = +1 [ .25 ] / -0 >.12 [ .305 ] ≤ .60 [ 1.524 ] = +2 [ .51 ] / -0 >.60 [ 1.524 ] ≤ 1.20 [ 30.48 ] = +4 [ 1.02 ] / -0 >1.20 [ 30.48 ] ≤ 3.00 [ 76.20 ] = +6 [ 1.52 ] / -0 >3.00 [ 76.20 ] = +.5% / -0
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<p><b>Fairview Microwave<sup>®</sup></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>
DESCRIPTION MINI SMP FEMALE TO RA MMCX PLUG CABLE FM-F086 COAX	
SIZE A	CAGE CODE 3FKR5
DRAWN BY SREITER	ITEM NO. FMCA2221
REV A	REV A