$50/75\Omega$ DC to 3000 MHz

### CASE STYLE: FF2586

### The Big Deal

- Minimum loss pad
- Wideband coverage, DC to 3000 MHz
- Quick connect / disconnect mating on F-Male side
- Excellent VSWR

### **Product Overview**

Mini-Circuits' SFQFM-5075+ is a coaxial  $50/75\Omega$  matching pad covering the DC to 3000 MHz frequency range, supporting impedance matching in a wide range of systems. This model is ideal for  $50/75\Omega$  impedance matching in systems where minimizing overall signal loss is a priority. The matching pad housed in a rugged unibody construction with SMA-Female (50 $\Omega$ ) to F-Male (75 $\Omega$ ) connectors.



CAUTION NOTE: Due to variability of female 'F' connector, make sure that the threads start no more than 0.030" (0.76) from the edge of the connector to mate with the matching pad.

# **Kev Features**

Feature	Advantages
Wideband, DC to 3000 MHz	Supports a wide variety of applications including CATV and DOCSIS® 3.1 systems and equipment.
Compact size, 0.39" x 1.56" x 0.43"	Accommodates tight space requirements for crowded system layouts.
Connectorized package SMA Female (50 $\Omega$ ) to F-Male (75 $\Omega$ ) connectors	Supports connections between components with different connector types.

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B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits website at www.minicircuits.com/MCLStore/terms.jsp

# Coaxial **Matching Pad**

### $50/75\Omega$ DC to 3000 MHz

### **Maximum Ratings**

Operating Temperature	-45°C to 100°C
Storage Temperature	-55°C to 100°C
Input Power	0.5 W

### **Features**

- · Quick connect / disconnect mating on F-Male side
- · Minimum loss pad
- Wideband coverage, DC to 3000 MHz
- Excellent VSWR
- Rugged unibody construction

### **Applications**

- Impedance matching
- Lab use for testing

## **SFQFM-5075+**



Connectors Model 50ΩF-SMA SFQFM-5075+ 75ΩM-F

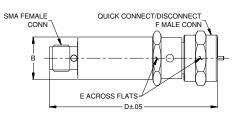
### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

# **Coaxial Connections**

Input	SMA-Female
Output	F-Male

### **Outline Drawing**



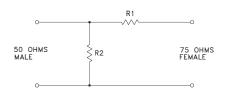


CAUTION NOTE: Due to variability of female 'F' connector, make sure that the threads start no more than 0.030" (0.76) from the edge of the connector to mate with the matching pad.

### Outline Dimensions (inch )

Α	В	С	D	Е	Wt.
	.39		1.56	.437	grams
	10.00		39.62	11.11	15

### **Electrical Schematic**



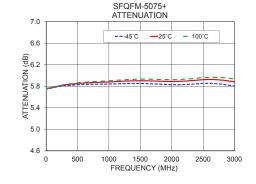
### Electrical Specifications at 25°C

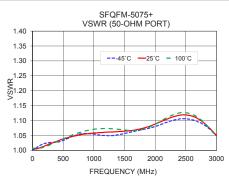
Paramete	r	Frequency (MHz)	Min.	Тур.	Max.	Unit	
Frequency Range			DC		3000	MHz	
Attenuation <sup>1</sup>	Nominal	DC-3000		5.7			
	Flatness <sup>2</sup>	DC-3000		±0.20			
		DC-100		0.05	0.20	dB	
		100-2000		0.15	0.30		
		2000-3000		0.10	0.30		
vswr		DC-100		1.02	1.10		
		100-2000		1.10	1.25	:1	
		2000-3000		1.20			
Input Power		DC-3000			0.5	W	

- 1. Attenuation varies by 0.3 dB max. over temperature
- 2. Flatness= variation over band divided by 2

### Typical Performance Data at 25°C

Frequency (MHz)	Attenuation (dB)	VSWR (:1)	
		<b>50</b> Ω	<b>75</b> $\Omega$
10	5.75	1.01	1.00
50	5.77	1.00	1.01
100	5.78	1.01	1.01
300	5.83	1.02	1.05
500	5.85	1.04	1.08
800	5.87	1.05	1.10
950	5.88	1.06	1.10
1000	5.88	1.06	1.10
1200	5.89	1.06	1.08
1500	5.90	1.06	1.05
1800	5.89	1.07	1.06
2000	5.89	1.09	1.10
2300	5.90	1.11	1.16
2500	5.92	1.12	1.19
2800	5.91	1.09	1.20
3000	5.88	1.05	1.19





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