

Coaxial Matching Pad

SFFF-5075+

50/75Ω DC to 3000 MHz

The Big Deal

- Wideband coverage, DC to 3000 MHz
- Good return loss
- Good power handling, 1W



Generic photo used for illustration purposes only
CASE STYLE: FF1833

Product Overview

Mini-Circuits' SFFF-5075+ is a coaxial 50/75Ω matching pad covering the DC to 3000 MHz frequency range, supporting impedance matching in a wide range of systems. Including CATV, broadband networks and more. This model is ideal for 50/75Ω impedance matching in systems where minimizing mismatch and signal reflections is a priority. The matching pad housed in a rugged unibody construction with SMA-female (50Ω) to F-female (75Ω) connectors.

Key Features

Feature	Advantages
Wideband, DC to 3000 MHz	Supports a wide variety of applications including CATV systems and equipment.
Compact size, 0.67" x 2.26"	Accommodates tight space requirements for crowded system layouts.
Connectorized package	Easy to interface with other devices and well suited for test setups. Also supports connection between components with different connector types.

Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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

50/75Ω

DC to 3000 MHz

SFFF-5075+



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Connectors	Model
75Ω F-F	SFFF-5075+
50Ω F-SMA	

+RoHS Compliant

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

Maximum Ratings

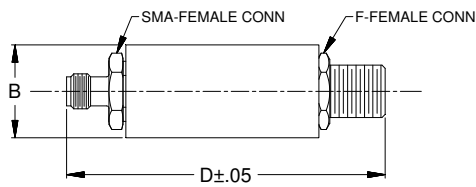
Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
Input Power	1W

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

75 Ω	F-Female
50 Ω	SMA-Female

Outline Drawing

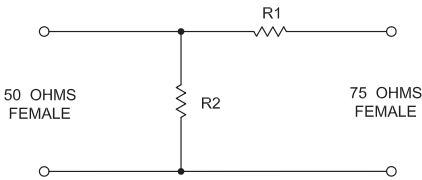


Outline Dimensions (inch/mm)

A	B	C	D	E	Wt.
--	.67	--	2.26	--	grams
--	17.02	--	57.40	--	32.2

Note: Please refer to case style drawing for details

Functional Schematic



Features

- Wideband coverage, DC to 3000 MHz
- Good return loss
- Rugged unibody construction
- Unidirectional only, 50-75Ω

Applications

- Impedance matching
- CATV Systems

Electrical Specifications at 25°C

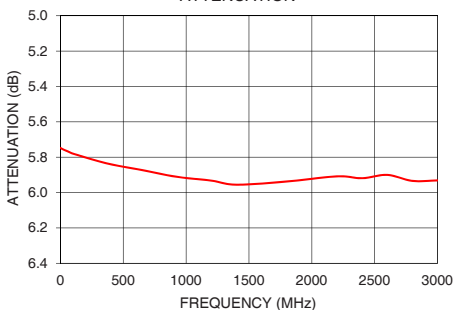
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	--	3000	MHz
Attenuation	Nominal	DC - 3000	--	5.9	--
	Flatness ¹	DC - 3000	--	--	0.4
75 Ω Return Loss	DC - 100	35	50	--	--
	100 - 1200	--	22	--	--
50 Ω Return Loss	DC - 100	38	50	--	--
	100 - 1200	--	30	--	--
Input Power	1200 - 3000	--	15	--	--
	DC - 3000	--	--	1	W

1. Flatness= variation over band divided by 2

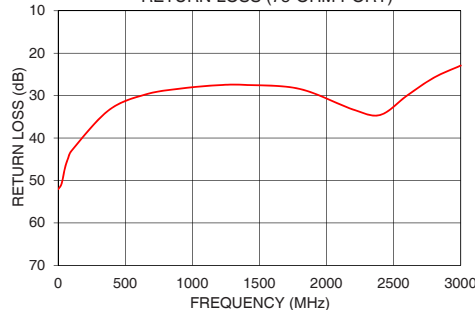
Typical Performance Data at 25°C

Frequency (MHz)	Attenuation (dB)	Return Loss (dB)	
		75 Ω	50 Ω
1.00	5.75	52.05	57.19
25.75	5.76	50.74	58.76
50.50	5.76	47.04	60.39
75.25	5.77	44.66	62.19
100.00	5.78	42.98	63.95
375.00	5.84	33.48	51.80
650.00	5.87	29.74	46.25
925.00	5.91	28.29	43.91
1200.00	5.93	27.53	42.88
1400.00	5.96	27.49	43.40
1800.00	5.94	28.42	41.10
2200.00	5.91	33.31	31.52
2400.00	5.92	34.55	27.61
2600.00	5.90	29.99	24.17
2800.00	5.93	25.76	21.42
3000.00	5.93	22.91	19.09

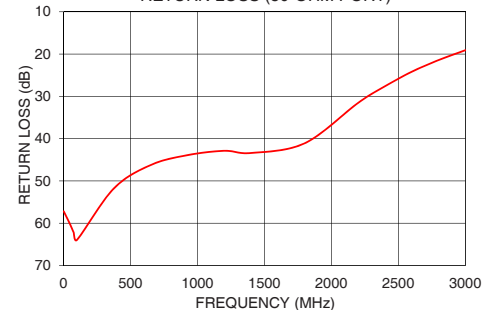
SFFF-5075+ ATTENUATION



SFFF-5075+ RETURN LOSS (75-OHM PORT)



SFFF-5075+ RETURN LOSS (50-OHM PORT)



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