Matching Pad

Z7550R-FMSF+

50/75Ω DC to 2500 MHz



CASE STYLE: H16

The Big Deal

- Excellent matching VSWR, 1.2:1 typical
- 0.25W Power Handling
- SMA-F (50Ω) to F-Type-M (75Ω) Connectors

Product Overview

Mini-Circuits' Z7550R-FMSF+ is a coaxial 50/75Ω resistive matching pad covering the DC to 2500 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 handles RF input power up to 0.25W and comes housed in a rugged, compact aluminium alloy case (1.25 x 1.25 x 0.75") with SAM-F (50Ω) to F-Type-M(75Ω) connectors.

Key Features

Feature	Advantages
Wideband, DC to 2500 MHz	Supports a wide variety of applications including CATV and DOCSIS® 3.1 systems and equipment.
Excellent matching VSWR, 1.2:1 typ.	Enables excellent signal power transmission from input to output, minimizing over all systems losses.
0.25W power handling	Supports a range of systems power requirements.
Compact size, 1.25 x 1.25 x 0.75"	Accommodates tight space requirements for crowded systems layouts.
SMA-F (50Ω) to Type-M (75Ω) connectors	Supports connections 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

Mini-Circuits®
www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

Matching Pad

Z7550R-FMSF+

50/75Ω DC to 2500 MHz



CASE STYLE: H16

Connectors	Model
75Ω F-M	Z7550R-FMSF+
50Ω S-F	

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

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

Features

- Minimum loss pad
- Wideband coverage, DC-2500MHz
- Connectorized package

Applications

- Impedance matching
- Cable / CATV & Broadband Fiber Networks

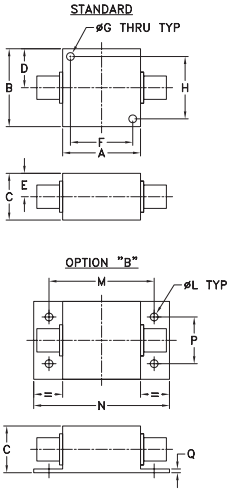
+RoHS Compliant

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

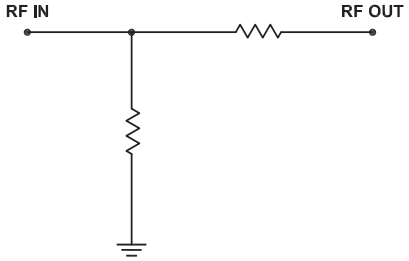


Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.750	.06	grams
--	--	3.18	42.88	55.37	19.05	1.52	70.0

Functional Schematic



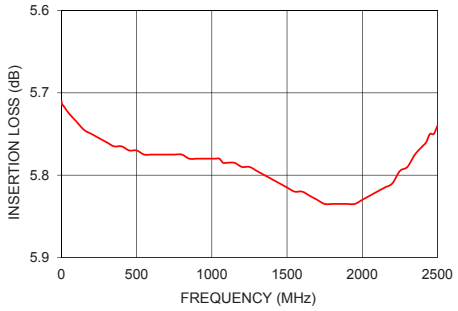
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range	-	DC	-	2500	MHz
Insertion Loss	10	-	5.7	6.0	dB
	950-2500	-	5.9	6.3	
VSWR	10	-	-	1.2	:1
	950-2500	-	-	1.6	
Power	DC-2500	-	-	0.25	W

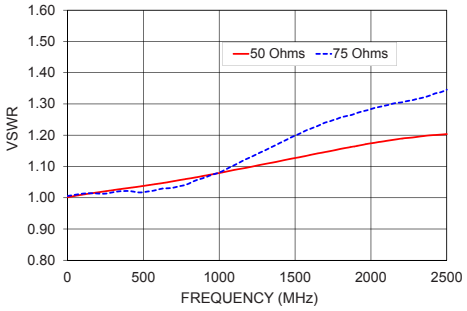
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR	
		50 Ω	**75 Ω**
10	5.72	1.00	1.01
50	5.73	1.01	1.01
100	5.74	1.01	1.01
250	5.76	1.02	1.01
950	5.78	1.07	1.07
1500	5.82	1.13	1.20
2000	5.83	1.17	1.28
2150	5.82	1.19	1.30
2300	5.79	1.19	1.32
2500	5.74	1.20	1.35

Z7550R-FMSF+
INSERTION LOSS



Z7550R-FMSF+
VSWR



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