Miniature Surface Mount

Fixed Attenuator

0.5W DC to 2500 MHz 0dB 50Ω



CASE STYLE: MMM168 PRICE: \$1.95 ea. QTY (20)

+RoHS Compliant

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



Maximum Ratings

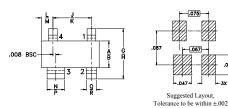
Operating Temperature -55°C to 85°C Storage Temperature -55°C to 100°C Permanent damage may occur if any of these limits are exceeded

Pin Connections

INPUT	4
OUTPUT	2
GROUND	1,3

Outline Drawing

PCB Land Pattern







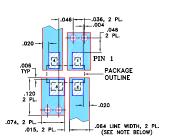
Α	В	С	D	Ε	F	G	Н	J	K
.045	.055	.105	.120	.047	.005	.083	.104	.070	.080
1.14	1.40	2.67	3.05	1.19	0.13	2.11	2.64	1.78	2.03
L	M	N	Р	Q	R	S	Т		wt
_		N .030				_			wt grams

Α	В	С	D	E	F	G	Н	J	K
.045	.055	.105	.120	.047	.005	.083	.104	.070	.080
1.14	1.40	2.67	3.05	1.19	0.13	2.11	2.64	1.78	2.03
L	M	N	Р	Q	R	S	Т		wt
.018	.024	.030	.036	.015	.021	.023	.005	9	grams
0.46	0.61	0.76	0.91	0.38	0.53	0.58	0.13		0.01

Outline Dimensions (inch)

			.120 3.05						
L	M	N	Р	Q	R	S	Т		wt
8	.024	.030	.036	.015	.021	.023	.005	9	grams
6	0.61	0.76	0.91	0.38	0.53	0.58	0.13		0.01

Demo Board MCL P/N: TB-39 Suggested PCB Layout (PL-225)



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS. 0.30" ± .00.2"; COPPER: 1/2 0.7. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED. 2. BOTTOM SIDE OF THE POB IS CONTINUOUS GROUND PLANE.

DENOTES FOB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

• aqueous washable

• wideband, DC to 2500 MHz

• excellent VSWR, through entire band

• miniature size, SOT143 package

Features

- **Applications** • cellular
- PCS
- ISM
- VHF/UHF

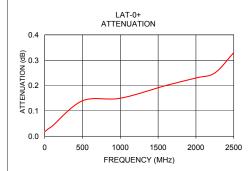
Electrical Specifications at 25°C

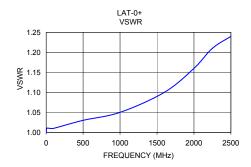
FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness, Max.			VSWR (:1) Max.			MAX. INPUT POWER ¹	
		DC-0.5	DC-1	DC-2.5	DC-0.5	DC-1	DC-2.5	(W)
f _L f _U	Nom.	GHz	GHz	GHz	GHz	GHz	GHz	
DC-2500	0+0.15	0.3	0.4	0.6	1.2	1.3	1.5	0.5

- 1. RF power at 25°C case temperature: ½Watt. Derate linearly to 0.2 Watt at 85°C.
- 2. Flatness= variation over band divided by 2

Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
1.00	0.02	1.00
10.00	0.02	1.01
50.00	0.03	1.01
100.00	0.04	1.01
500.00	0.14	1.03
1000.00	0.15	1.05
1600.00	0.20	1.10
2000.00	0.23	1.16
2250.00	0.25	1.21
2500.00	0.33	1.24





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-Circuits tapplicable established test performance criteria and measurement instructions.

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