

# Miniature Surface Mount Fixed Attenuator

50Ω 0.5W 15dB DC to 2500 MHz

LAT-15+



CASE STYLE: MMM168  
PRICE: \$1.95 ea. QTY (10-49)

## 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

## Features

- wideband, DC to 2500 MHz
- excellent VSWR, through entire band
- miniature size, SOT143 package
- aqueous washable

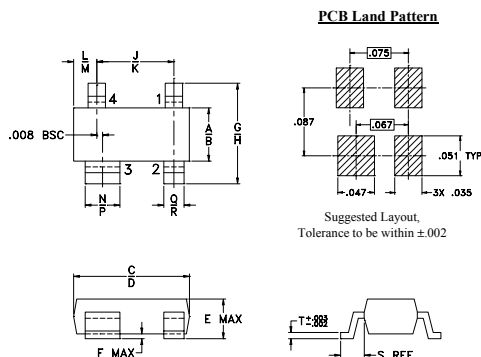
## Applications

- cellular
- PCS
- ISM
- VHF/UHF

+ RoHS compliant in accordance  
with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS  
Compliance. See our web site for RoHS Compliance  
methodologies and qualifications.

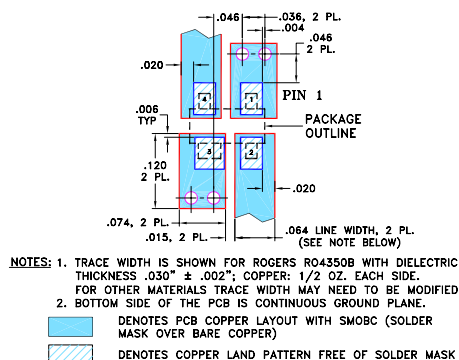
## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	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	P	Q	R	S	T			wt
.018	.24	.030	.036	.015	.021	.023	.005			grams
0.46	6.10	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)



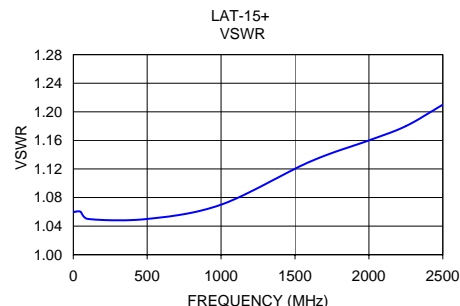
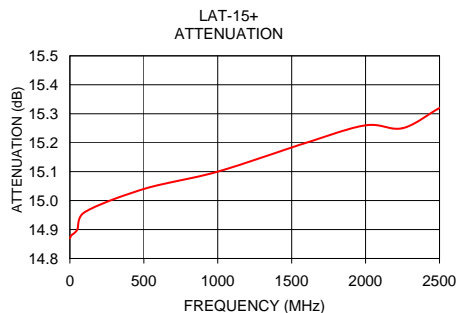
## Electrical Specifications at 25°C

FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness, Max.			VSWR (:1) Max.			MAX. INPUT POWER <sup>1</sup> (W)	
	DC-0.5 GHz	DC-1 GHz	DC-2.5 GHz	DC-0.5 GHz	DC-1 GHz	DC-2.5 GHz		
f <sub>L</sub> -f <sub>U</sub>	Norm.							
DC-2500	15±0.8	0.3	0.5	0.9	1.3	1.4	1.6	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	14.87	1.06
10.00	14.88	1.06
50.00	14.90	1.06
100.00	14.96	1.05
500.00	15.04	1.05
1000.00	15.10	1.07
1600.00	15.20	1.13
2000.00	15.26	1.16
2250.00	15.25	1.18
2500.00	15.32	1.21



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

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