

# Miniature Ceramic Fixed Attenuator

50Ω 1W 9dB DC to 7000 MHz

**PAT-9+**  
**PAT-9**



## Maximum Ratings

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

## Pin Connections

INPUT	1
OUTPUT	3
GROUND	2,4

## Features

- wideband, DC to 7000 MHz
- excellent VSWR, through entire band
- miniature size
- aqueous washable

## Applications

- power leveling
- impedance match improvement

CASE STYLE: AF320  
PRICE: \$2.95 ea. QTY (10-49)

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

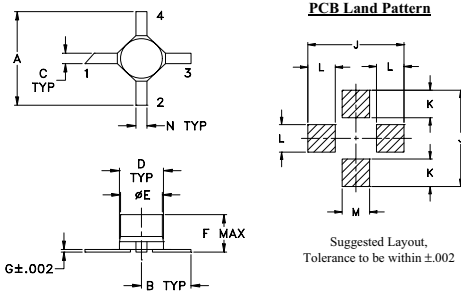
*The +Suffix identifies RoHS Compliance. See our web site  
for RoHS Compliance methodologies and qualifications.*

## Electrical Specifications at 25°C

FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness, Max.	VSWR (:1) Max.			MAX. INPUT POWER (W)			
		DC-1 GHz	DC-2.5 GHz	DC-f <sub>U</sub> GHz				
f <sub>L</sub> -f <sub>U</sub>	DC-1 GHz	DC-2.5 GHz	DC-f <sub>U</sub> GHz					
DC-7000	9±0.4	0.4	0.6	1.7	1.3	1.4	1.5	1

1. RF power at 25°C case temperature: 1 Watt. Derate linearly to 0.1 Watt at 100°C.

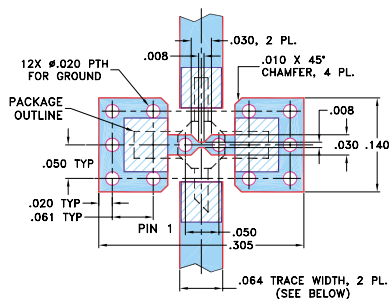
## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.200	.100	.020	.070	.068	.057	.005
5.08	2.54	0.51	1.78	1.73	1.45	0.13
H	J	K	L	M	N	wt
--	.230	.065	.060	.080	.040	grams
--	5.84	1.65	1.52	2.03	1.02	0.04

## Demo Board MCL P/N: TB-319 Suggested PCB Layout (PL-208)



- NOTES:**
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
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## Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
50.00	9.20	1.05
796.25	9.37	1.07
1542.50	9.47	1.09
2288.75	9.60	1.09
3035.00	9.81	1.10
3781.25	9.78	1.09
4527.50	9.89	1.08
5273.75	10.00	1.05
6020.00	10.29	1.05
7015.00	10.61	1.14

