

Fixed Attenuator

50Ω 1W 0dB DC to 5000 MHz

Maximum Ratings

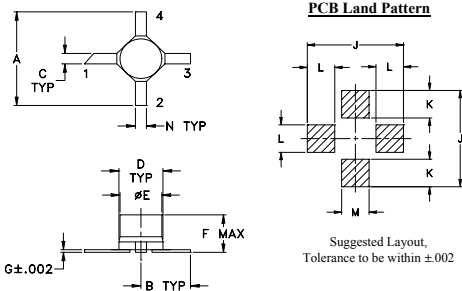
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

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

Pin Connections

INPUT	1
OUTPUT	3
GROUND	2,4

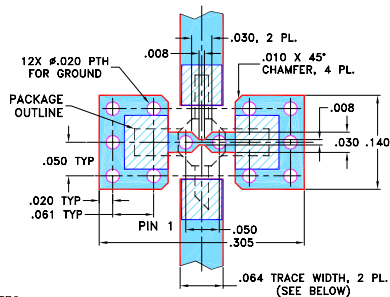
Outline Drawing



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.
-  DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
-  DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- wideband, DC to 5000 MHz
- excellent VSWR, through entire band
- miniature size
- aqueous washable

Applications

- power leveling
- impedance match improvement

Electrical Specifications at 25°C

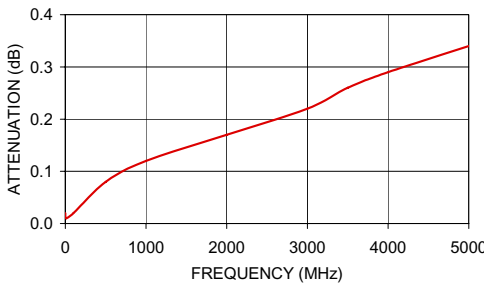
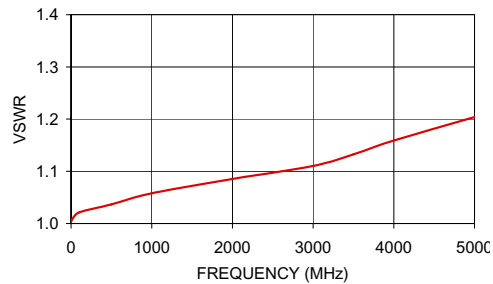
FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness, Max.			VSWR (:1) Max.			MAX. INPUT POWER (W)
	DC-1 GHz	DC-2.5 GHz	DC-f _u GHz	DC-1 GHz	DC-2.5 GHz	DC-f _u GHz	
DC-5000	0+0.2	0.2	0.4	1.2	1.3	1.55	1

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

Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
1.00	0.02	1.00
10.00	0.01	1.01
100.00	0.02	1.02
500.00	0.08	1.04
1000.00	0.12	1.06
2000.00	0.17	1.09
3000.00	0.22	1.11
3500.00	0.26	1.13
4000.00	0.29	1.16
5000.00	0.34	1.20

PAT-0+
ATTENUATION

PAT-0+
VSWR

CASE STYLE: AF320
PRICE: \$2.95 ea. QTY (20)

+RoHS Compliant

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



**Available Tape and Reel
at no extra cost**

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 2000, 3000

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-Circuits' 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

REV. G
M108294
PAT-0+
120304