

Miniature Ceramic Fixed Attenuator

50Ω 1W 12dB DC to 7000 MHz

PAT-12+



Generic photo used for illustration purposes only

CASE STYLE: AF320

+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" 1000

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

Features

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

Applications

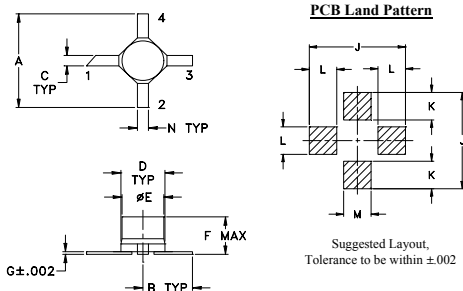
- power leveling
- impedance match improvement

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-7000	12±0.6	0.5	0.6	1.8	1.3	1.4	1.5

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

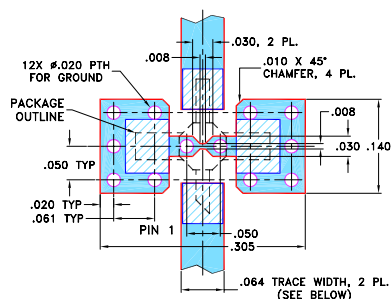
Outline Drawing



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

Notes

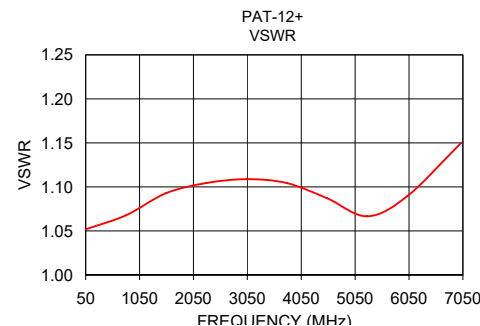
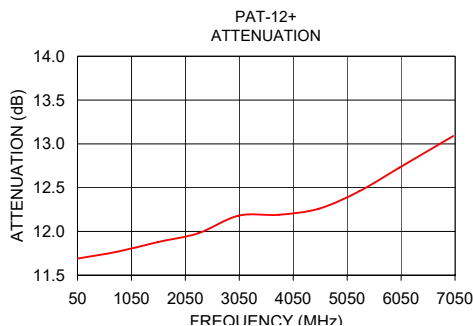
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Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
50.00	11.69	1.05
796.25	11.77	1.07
1542.50	11.88	1.09
2288.75	11.98	1.10
3035.00	12.18	1.11
3781.25	12.19	1.10
4527.50	12.26	1.09
5273.75	12.46	1.07
6020.00	12.73	1.09
7015.00	13.09	1.15



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