

Miniature Ceramic Fixed Attenuator

50Ω 1W 20dB DC to 7000 MHz

PAT-20+
PAT-20



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)**

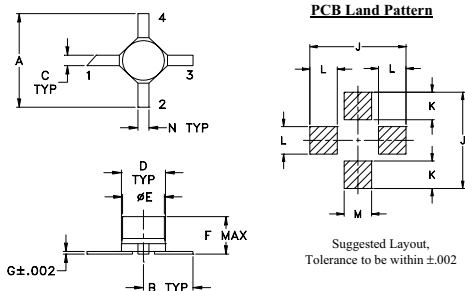
*The +Suffix identifies RoHS Compliance. See our web site
for RoHS Compliance methodologies and qualifications.*

Electrical Specifications at 25°C

FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness, Max.			VSWR (:1) Max.			MAX. INPUT POWER (W)	
	f _L -f _U	DC-1 GHz	DC-2.5 GHz	DC-f _U GHz	DC-1 GHz	DC-2.5 GHz		DC-f _U GHz
DC-7000	20±1.3	0.5	0.7	2.6	1.4	1.4	1.5	1

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

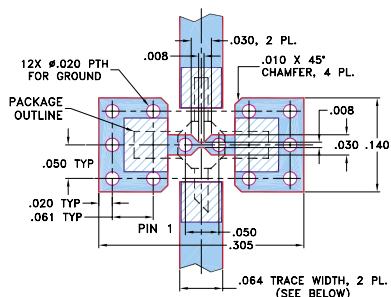
Outline Drawing



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.

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

Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
50.00	19.05	1.12
796.25	19.07	1.15
1542.50	19.16	1.19
2288.75	19.33	1.21
3035.00	19.58	1.20
3781.25	19.63	1.19
4527.50	19.83	1.16
5273.75	20.10	1.15
6020.00	20.53	1.18
7015.00	21.06	1.25

