

Miniature Ceramic Fixed Attenuator

50Ω 1W 0dB DC to 5000 MHz

PAT-0+



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

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

Applications

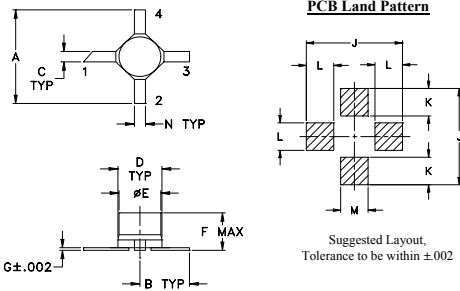
- power leveling
- impedance match improvement

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 | |
| f _L -f _u | Norm. | DC-1 GHz | DC-2.5 GHz | DC-f _u GHz | |
| DC-5000 | 0+0.2 | 0.2 | 0.4 | 0.5 | 1 |

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

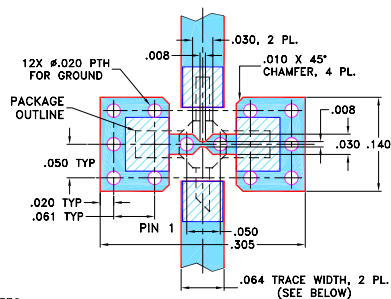
Outline Drawing



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)

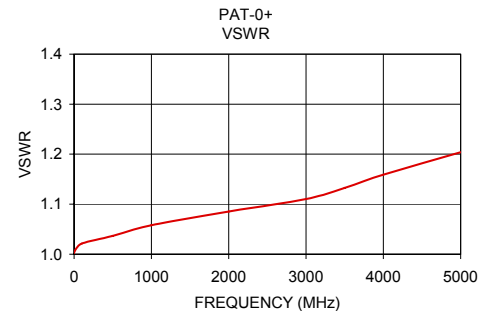
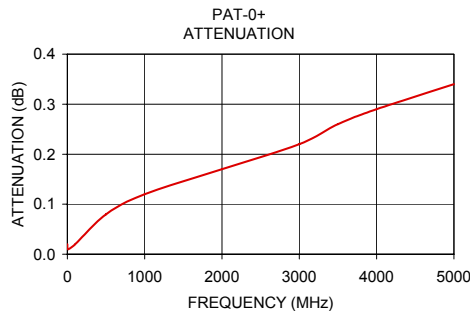


NOTES:

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) |
|-----------------|------------------|-----------|
| 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 |



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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