Miniature Plastic

Fixed Attenuator

GAT-10+

50Ω 0.5W 10dB DC to 8000 MHz

top bottom

CASE STYLE: FG873
PRICE: $2.35 ea. QTY (10-49)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C

Pin Connections

INPUT	1
OUTPUT	3
GROUND	2,4

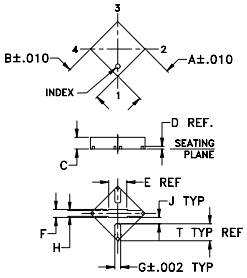
Features

- miniature package MCLP™ 3x3 mm
- specified to 8000 MHz, useable to 10000 MHz
- excellent VSWR, 1:15:1 typ.

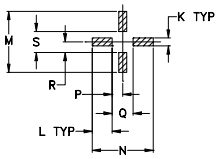
Applications

- cellular
- PCS
- communications
- radar
- defense

Outline Drawing



PCB Land Pattern



Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J
0.118	0.118	0.035	0.008	0.07	0.024	0.017	0.018	0.021
3.00	3.00	0.89	0.20	1.78	0.61	0.43	0.46	0.53

K	L	M	N	P	Q	R	S	T	wt
0.024	0.061	0.186	0.186	0.032	0.064	0.032	0.064	0.05	grams
0.61	1.55	4.72	4.72	0.81	1.63	0.81	1.63	1.27	0.02

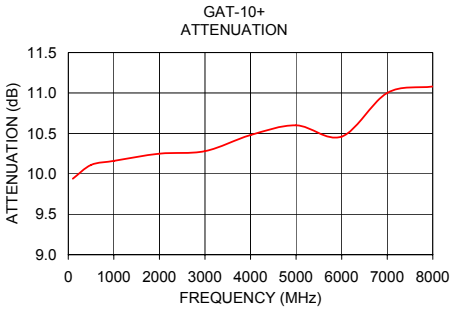
Electrical Specifications at 25°C

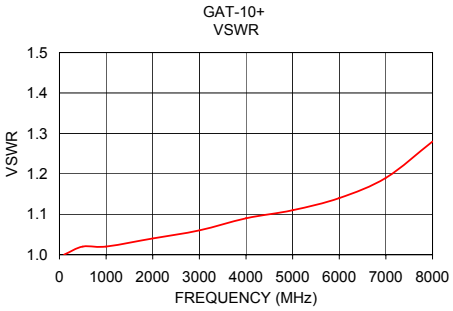
FREQ. RANGE (MHz)	ATTENUATION (dB) Flatness				VSWR (:1)					MAX. INPUT POWER [1] (W)
		DC-1 GHz	1-5 GHz	5-8 GHz	DC-1 GHz		1-5 GHz		5-8 GHz	
f_L-f_U	Nom.	Typ.	Typ.	Typ.	Typ.	Max.	Typ.	Max.	Typ.	
DC-8000	10±0.4	0.15	0.2	0.3	1.05	1.2	1.15	1.3	1.3	0.5

1. RF power at 25°C case temperature: ½Watt. Derate linearly to 0.2 Watt at 85°C.
2. Flatness= variation over band divided by 2

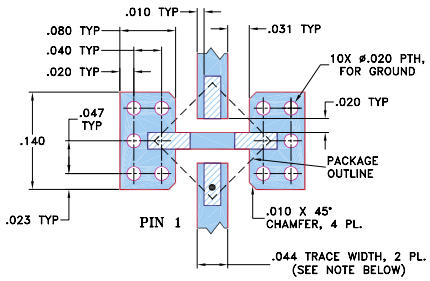
Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
100.00	9.94	1.00
500.00	10.11	1.02
1000.00	10.16	1.02
2000.00	10.25	1.04
3000.00	10.28	1.06
4000.00	10.48	1.09
5000.00	10.60	1.11
6000.00	10.46	1.14
7000.00	11.00	1.19
8000.00	11.08	1.28





Demo Board MCL P/N: TB-154
Suggested PCB Layout (PL-126)



NOTES:
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .0015"; 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