

# Fixed Attenuators

## GAT+ SERIES

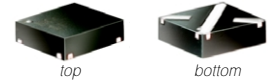
50Ω 0 to 30dB DC to 8 GHz\*

### Features

- miniature package MCLP™ 3X3 mm
- specified to 8 GHz, useable to 10 GHz
- excellent VSWR, 1.15:1 typ. to 8 GHz

### Applications

- cellular
- PCS
- communication
- radar
- defense



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

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

The +suffix has been added in order to identify RoHS Compliance. There has been no change to the model's material, form, fit, or function. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications at 25°C

MODEL NO.	FREQ. RANGE (GHz) $f_L$ - $f_U$	ATTENUATION (dB)				VSWR (:1)			MAX. INPUT POWER (W)		
		Flatness				DC - 1 GHz Typ. Max.	DC - 5GHz Typ. Max.	5 - 8 GHz Typ.			
		Nom.	DC - 1 GHz Typ.	DC - 5GHz Typ.	5 - 8 GHz Typ.						
GAT-0+	DC-8	0±0.2	0.1	0.2	0.2	1.05	1.2	1.15	1.35	1.25	0.5
GAT-1+	DC-8	1±0.2	0.1	0.2	0.2	1.05	1.2	1.15	1.3	1.3	0.5
GAT-2+	DC-8	2±0.2	0.1	0.2	0.2	1.05	1.2	1.15	1.3	1.3	0.5
GAT-3+	DC-8	3±0.3	0.1	0.2	0.2	1.05	1.2	1.15	1.3	1.35	0.5
GAT-4+	DC-8	4±0.3	0.1	0.2	0.2	1.05	1.2	1.15	1.3	1.35	0.5
GAT-5+	DC-8	5±0.3	0.1	0.2	0.2	1.05	1.2	1.15	1.3	1.35	0.5
GAT-6+	DC-8	6±0.3	0.1	0.2	0.3	1.05	1.2	1.15	1.3	1.35	0.5
GAT-7+	DC-8	7±0.3	0.1	0.2	0.3	1.05	1.2	1.15	1.3	1.35	0.5
GAT-8+	DC-8	8±0.4	0.1	0.2	0.3	1.05	1.2	1.15	1.3	1.35	0.5
GAT-9+	DC-8	9±0.4	0.1	0.2	0.3	1.05	1.2	1.15	1.3	1.3	0.5
GAT-10+	DC-8	10±0.4	0.15	0.2	0.3	1.05	1.2	1.15	1.3	1.3	0.5
GAT-12+	DC-8	12±0.4	0.15	0.2	0.3	1.05	1.2	1.15	1.3	1.3	0.5
GAT-15+	DC-8	15±0.4	0.15	0.3	0.3	1.05	1.2	1.15	1.3	1.35	0.5
GAT-20+	DC-8	20±0.4	0.15	0.2	0.2	1.05	1.2	1.15	1.3	1.35	0.5
GAT-30+	DC-3	30±0.9	0.5	1.2	—	1.05	1.2	1.15	1.3	—	0.5

\* Up to 3 GHz for GAT-30+  
Flatness=variation overband divided by 2

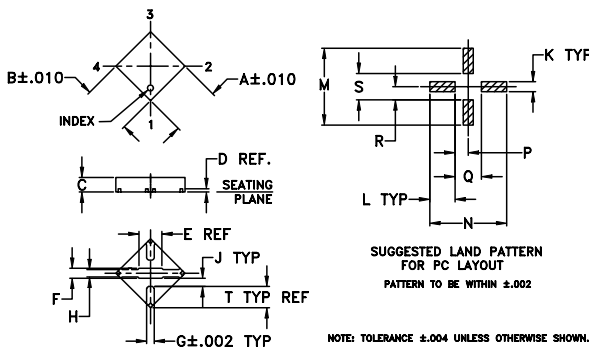
### Pin Connections

PORT	hl
INPUT	1
OUTPUT	3
GROUND	2,4

### Maximum Ratings

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

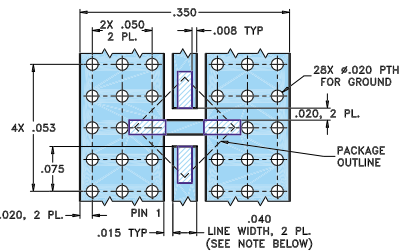
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt
0.118	0.118	0.035	0.008	0.07	0.024	0.017	0.018	0.018										
3.00	3.00	0.89	0.20	1.78	0.61	0.43	0.46	0.46										
0.024	0.061	0.186	0.186	0.032	0.064	0.032	0.064	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	grams
0.61	1.55	4.72	4.72	0.81	1.63	0.81	1.63	1.27	20.0									

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



- NOTE:
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 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  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

designers kit available

Kit No.	No. of Units in Kit	Description	Price \$ per Kit
K1-GAT	45	5 of ea. GAT-2+,3+,4+,6+,8+,10+,15+,20+,30+99.95	
K2-GAT	25	5 of ea. GAT-3+,6+,10+,15+,20+	59.95

