

Miniature Plastic Fixed Attenuator

50Ω 0.5W 30dB DC to 3000 MHz

GAT-30+

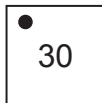
Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C
Permanent damage may occur if any of these limits are exceeded.	

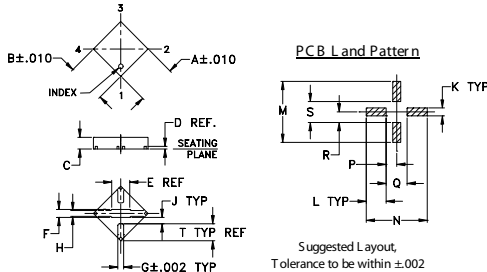
Pin Connections

INPUT	1
OUTPUT	3
GROUND	2,4

Product Marking



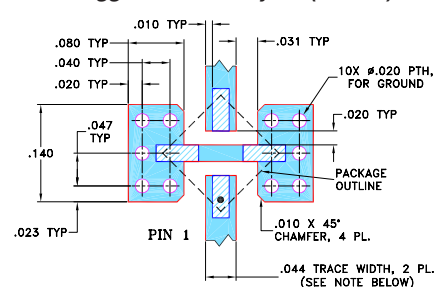
Outline Drawing



Outline Dimensions (inch)

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

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



NOTES:

- 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.
- 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

Features

- miniature package MCLP™ 3x3 mm
- specified to 3000 MHz, useable to 8000 MHz
- excellent VSWR, 1:15:1 typ.

Applications

- cellular
- PCS
- communications
- radar
- defense



CASE STYLE: FG873

+RoHS Compliant

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

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000
13"	2000, 3000, 4000

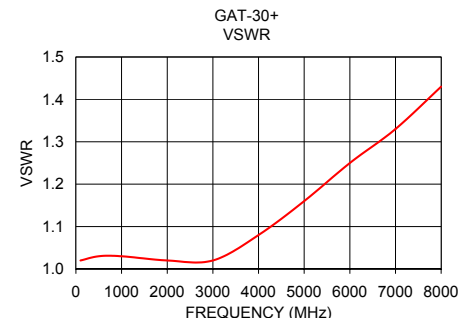
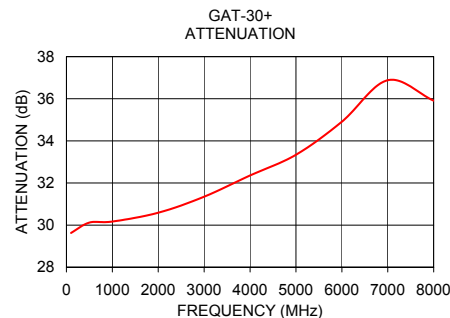
Electrical Specifications at 25°C

FREQ. RANGE (MHz)	ATTENUATION (dB)		VSWR (:1)		MAX. INPUT POWER ¹ (W)
	DC-1 GHz	1-3 GHz	DC-1 GHz	1-3 GHz	
$f_L - f_U$	Nom.	Typ.	Typ.	Max.	
DC-3000	30±0.9	0.5	1.2	1.3	0.5

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

Typical Performance Data

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
100.00	29.63	1.02
500.00	30.12	1.03
1000.00	30.17	1.03
2000.00	30.59	1.02
3000.00	31.35	1.02
4000.00	32.36	1.08
5000.00	33.34	1.16
6000.00	34.91	1.25
7000.00	36.88	1.33
8000.00	35.91	1.43



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



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