



Mini-Circuits®

MINIATURE PLASTIC

Fixed Attenuator

GAT-30+

50Ω 0.5 W 30 dB DC to 3 GHz

FEATURES

- Wideband, DC to 8 GHz
- Miniature package, 3x3 mm MCLP™
- Specified to 3 GHz, useable to 8 GHz
- Excellent VSWR, 1.15:1 typ.



Generic photo used for illustration purposes only

CASE STYLE: FG873

+RoHS Compliant

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

APPLICATIONS

- Cellular
- PCS
- Communications
- Radar
- Defense

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	8	GHz
Attenuation, Nominal			30±0.9		dB
Attenuation, Flatness ¹	DC - 1		0.5		dB
	1 - 3		1.2		
VSWR	DC - 1		1.05	1.2	:1
	1 - 3		1.15	1.3	
Input Power ²				0.5	W

1. Flatness= variation over band divided by 2

2. RF power at 25°C case temperature: ½Watt. Derate linearly to 0.2 Watt at 85°C.

ABSOLUTE MAXIMUM RATINGS

Parameter	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.





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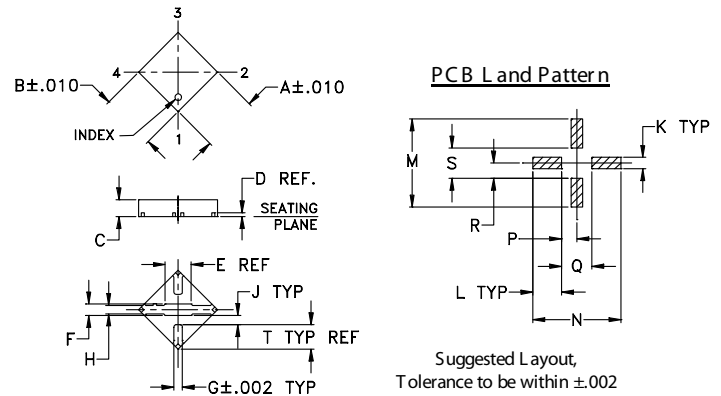
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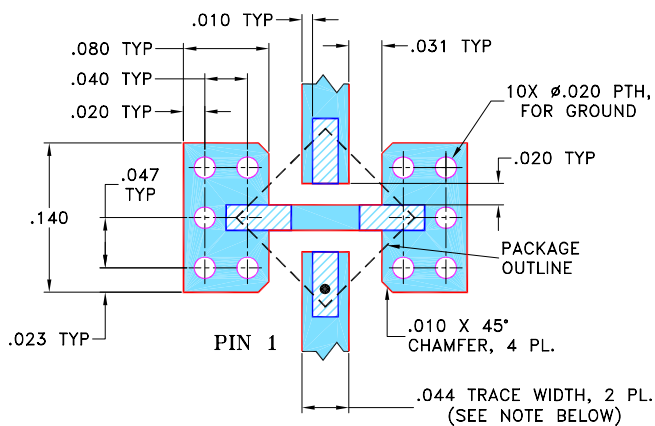
PAD CONNECTIONS

INPUT	1
OUTPUT	3
GROUND	2,4

OUTLINE DRAWING



DEMO BOARD MCL P/N: TB-154
SUGGESTED PCB LAYOUT (PL-126)



NOTES:

- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS $.020" \pm .0015"$; 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.

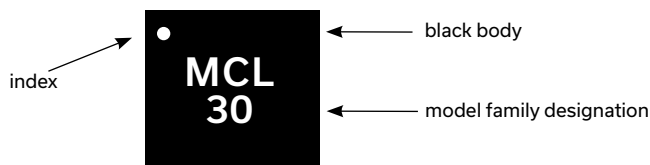
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

TAPE & REEL INFORMATION: F68

PRODUCT MARKING



Marking may contain other features or characters for internal lot control

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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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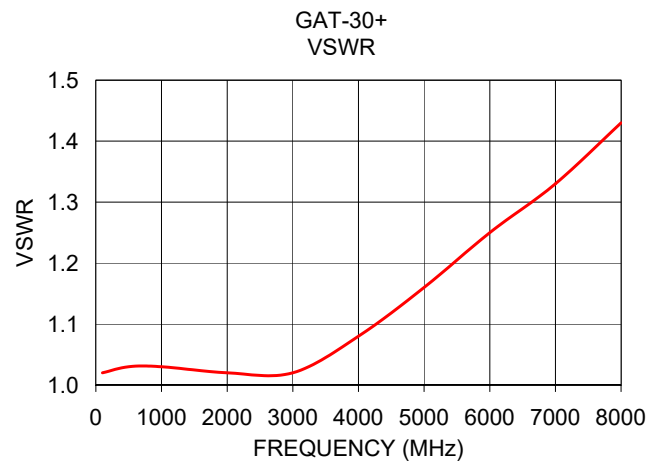
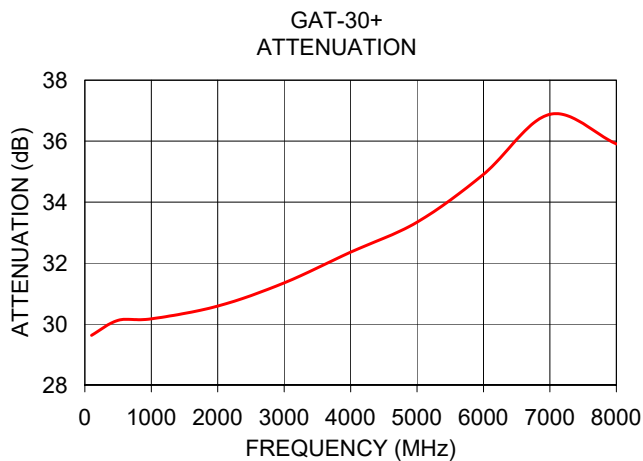
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TYPICAL PERFORMANCE DATA AND CHARTS

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-Circuits' 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/terms/viewterm.html

