



FEATURES

- Wideband, DC to 8 GHz
- Miniature package, 3x3 mm MCLP™
- Specified to 8 GHz, useable to 10 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			10±0.4		dB
Attenuation, Flatness ¹	DC - 1		0.15		dB
	1 - 5		0.2		
	5 - 8		0.3		
VSWR	DC - 1		1.05	1.2	:1
	1 - 5		1.15	1.3	
	5 - 8		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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MINIATURE PLASTIC

Fixed Attenuator

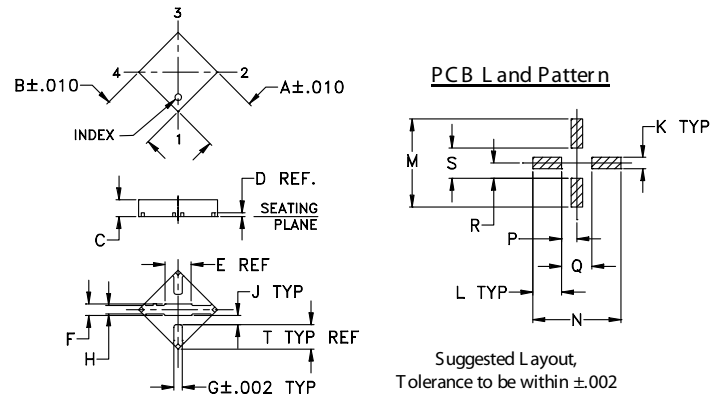
GAT-10+

50Ω 0.5 W 10 dB DC to 8 GHz

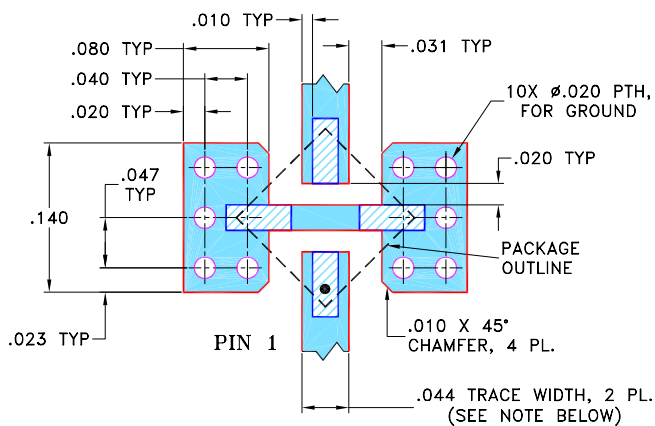
PAD CONNECTIONS

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.

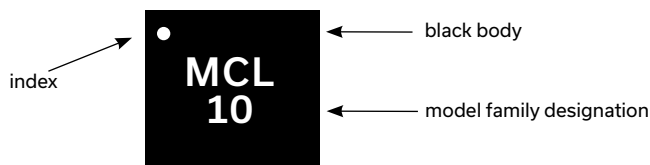
-  DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
-  DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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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MINIATURE PLASTIC

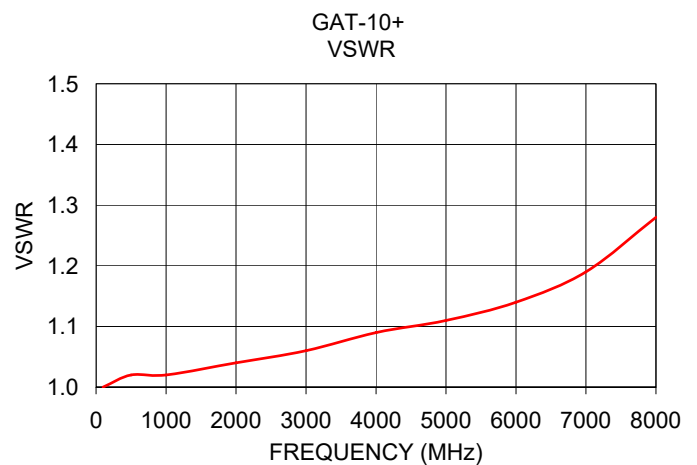
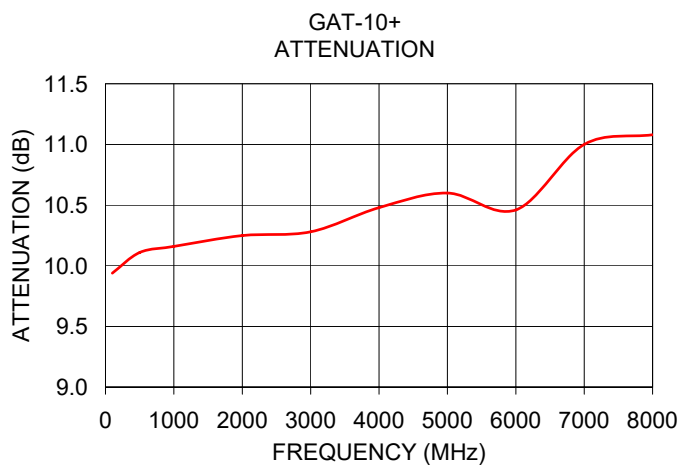
Fixed Attenuator

GAT-10+

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TYPICAL PERFORMANCE DATA AND CHARTS

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



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.
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