

Microwave Precision Fixed Attenuator

YAT-0+

50Ω 2W 0dB DC to 18 GHz

Maximum Ratings

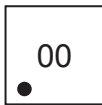
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

Permanent damage may occur if any of these limits are exceeded.

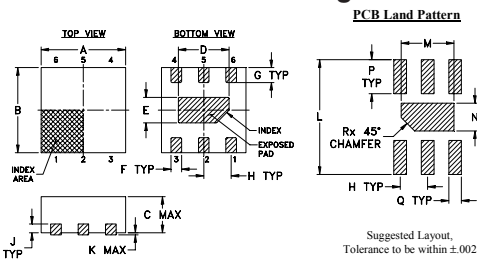
Pad Connections

INPUT	2
OUTPUT	5
GROUND	Bottom exposed pad
GROUND EXTERNALLY	1,3,4,6

Product Marking



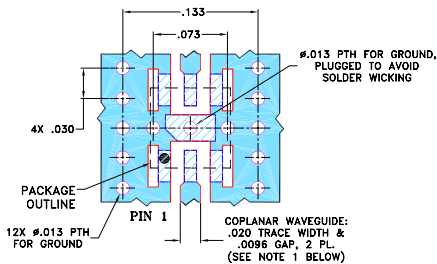
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J
.079	.079	.031	.047	.024	.010	.014	.026	.008
2.01	2.01	0.79	1.19	0.61	0.25	0.36	0.66	0.20
K	L	M	N	P	Q	R		wt
.002	.106	.049	.026	.031	.012	.012		grams
0.05	2.69	1.24	0.66	0.79	0.30	0.30		0.006

Demo Board MCL P/N: TB-621-0+ Suggested PCB Layout (PL-349)



NOTES: 1. COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001"; 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

Features

- miniature package MCLP™ 2x2 mm
- wide bandwidth, DC-18 GHz
- excellent attenuation accuracy & flatness

Applications

- cellular
- PCS
- communications
- radar
- defense



CASE STYLE: MC1630
PRICE: \$2.99 ea. QTY (20)

+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, 2000

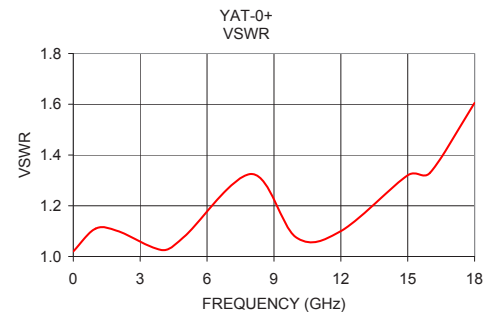
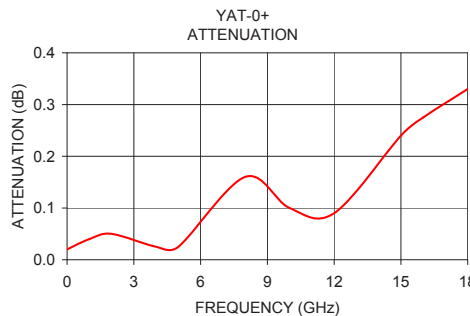
Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	18	GHz
Attenuation	DC - 18	—	0	—	
	DC - 5	0	0.05	0.2	dB
	5 - 15	0	0.18	0.4	
VSWR	15 - 18	0	0.26	0.5	
	DC - 5	—	1.20	1.3	
	5 - 15	—	1.34	1.5	:1
15 - 18	—	1.6	1.8		
Input Power ¹	DC - 18	—	—	2	W

1. RF power at 25°C case temperature: 2Watt. Derate linearly to 0.8W at 85°C

Typical Performance Data

Frequency (GHz)	Attenuation (dB)	VSWR (:1)
0.001	0.02	1.02
1.0	0.04	1.11
2.0	0.05	1.10
4.0	0.03	1.03
5.0	0.03	1.08
8.0	0.16	1.33
10.0	0.10	1.08
12.0	0.09	1.10
15.0	0.24	1.32
16.0	0.28	1.33
18.0	0.33	1.61



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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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