

Surface Mount High Reliability Mixer

ADE-R3GLH+

Level 10 (LO Power +10 dBm) 2000 to 2700 MHz



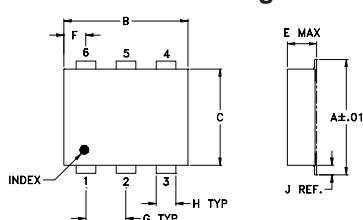
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

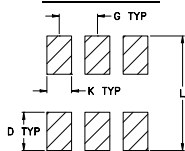
Pin Connections

LO	6
RF	3
IF	2
GROUND	1,4,5

Outline Drawing



PCB Land Pattern

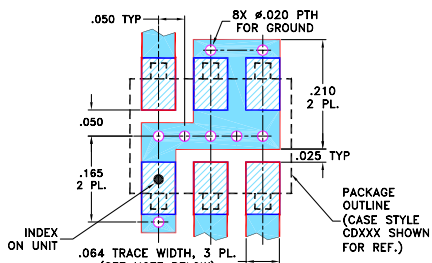


Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.112	.055	.100
6.91	7.87	5.59	2.54	2.84	1.40	2.54
H	J	K	L			wt
.030	.026	.065	.300			grams
0.76	0.66	1.65	7.62			0.20

Demo Board MCL P/N: TB-03 Suggested PCB Layout (PL-052)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; 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

- hermetically sealed ceramic quad
- low conversion loss, 5.2 dB typ.
- good L-R isolation, 35 dB typ.
- low profile package
- aqueous washable
- protected by US Patent 6,133,525

Applications

- wireless/VSAT systems
- ISM
- UMTS

CASE STYLE: CD542

PRICE: \$3.85 ea. QTY. (10-49)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

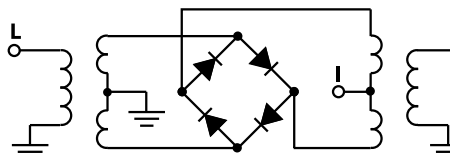
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
		LO	RF	LO	IF	
2000-2700	5.2	35	24	23	9	14

1 dB COMP: +4 dBm typ.
Phase detection, positive polarity

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
2000.00	5.49	34.29	16.76	1.03	1.62
2060.00	5.52	36.18	17.86	1.17	1.64
2080.00	5.57	36.85	18.17	1.23	1.67
2100.00	5.56	37.25	18.51	1.30	1.68
2160.00	5.37	37.55	19.63	1.33	1.66
2200.00	5.24	37.53	20.20	1.39	1.71
2260.00	5.22	37.61	21.09	1.42	1.69
2280.00	5.21	37.64	21.31	1.44	1.73
2300.00	5.17	38.00	21.68	1.48	1.74
2360.00	5.16	37.14	22.45	1.45	1.73
2380.00	5.14	36.93	22.80	1.45	1.77
2400.00	5.07	36.52	23.12	1.48	1.79
2460.00	5.18	35.50	24.03	1.46	1.79
2480.00	5.17	35.31	24.31	1.46	1.82
2500.00	5.12	35.52	24.49	1.47	1.83
2560.00	5.16	35.64	25.29	1.37	1.84
2580.00	5.12	36.38	25.46	1.38	1.87
2600.00	5.06	36.52	25.67	1.39	1.88
2680.00	5.11	36.22	26.43	1.29	1.92
2700.00	5.08	36.38	26.54	1.28	1.93

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED
IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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-Circuit's 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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Page 1 of 2

