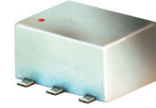


Surface Mount High Reliability Mixer

ADE-R272MH+

Level 13 (LO Power +13 dBm) 1300 to 2700 MHz



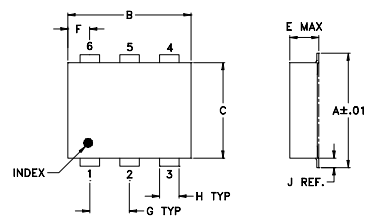
Maximum Ratings

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.	

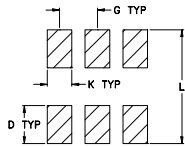
Pin Connections

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

Outline Drawing



PCB Land Pattern

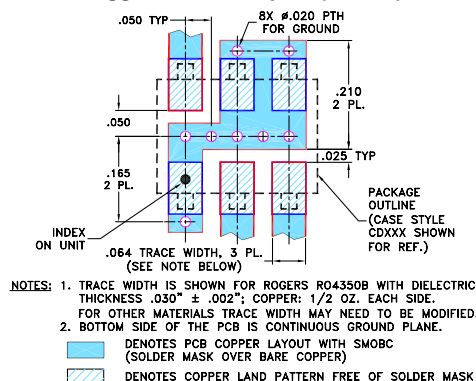


Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.162	.055	.100
6.91	7.87	5.59	2.54	4.11	1.40	2.54
H	J	K	L	wt		
.030	.026	.065	.300	grams		
0.76	0.66	1.65	7.62	0.25		

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



Features

- hermetically sealed ceramic quad
- low conversion loss, 5.6 dB typ.
- good L-R isolation, 34 dB typ.
- low profile package
- aqueous washable
- protected by US Patent 6,133,525

Applications

- wireless/VSAT system
- ISM
- cellular

Electrical Specifications

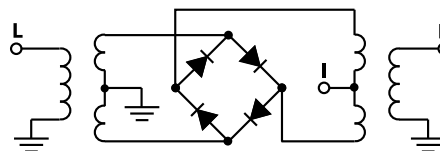
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF	IF	\bar{X}	σ	Max.	Typ.	Min.	Typ.	Min.	Typ.
1300-2700	DC-600	5.6	0.10	9.5	34	24	25	11	18

1 dB COMP: +9 dBm typ.

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
1300.00	1330.00	5.54	30.22	17.16	1.61	1.59
1360.00	1390.00	5.60	30.43	17.96	1.56	1.54
1480.00	1510.00	6.00	32.56	20.17	2.04	1.60
1560.00	1590.00	5.99	32.30	20.81	2.14	1.65
1620.00	1650.00	5.99	32.76	21.37	2.37	1.72
1700.00	1730.00	6.07	33.19	21.93	2.61	1.85
1760.00	1790.00	6.02	33.60	22.58	2.43	1.89
1840.00	1870.00	5.78	33.69	23.20	2.43	1.96
1900.00	1930.00	5.88	33.81	23.76	2.76	2.05
1980.00	2010.00	5.84	34.08	24.42	2.68	2.16
2040.00	2070.00	5.69	33.99	24.82	2.39	2.18
2180.00	2210.00	5.46	34.22	26.30	2.18	2.42
2260.00	2290.00	5.47	37.67	27.12	1.87	2.62
2320.00	2350.00	5.46	36.58	27.49	1.97	2.80
2400.00	2430.00	5.30	34.50	27.91	2.02	2.99
2460.00	2490.00	5.23	33.51	28.36	1.86	3.12
2540.00	2570.00	5.29	33.30	29.10	1.70	3.29
2600.00	2630.00	5.39	33.21	29.68	1.78	3.44
2680.00	2710.00	5.71	33.33	30.43	2.15	3.67
2740.00	2770.00	6.09	33.60	30.88	2.73	3.75

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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

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.

REV. OR
M109914
ADE-R272MH+
ED-12874/4
WL/TD/QL
090918
Page 1 of 2

