

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

Pin Connections

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

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

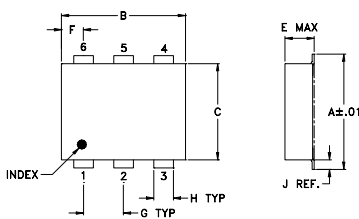
- wireless/VSAT system
- ISM
- cellular

CASE STYLE: CD636
PRICE: \$3.35 ea. QTY. (10-49)

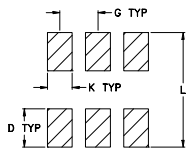
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Outline Drawing



PCB Land Pattern



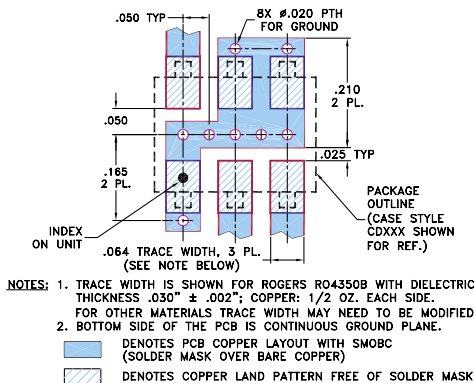
Suggested Layout, Tolerance to be within ±.002

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)



Electrical Specifications

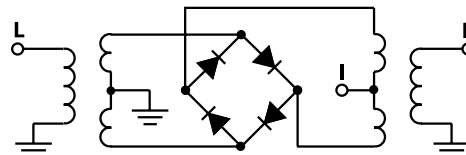
FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
LO/RF	IF	\bar{X}	σ	Max.	Typ. Min.	Typ. Min.	Typ. Min.	Typ.	
1300-2700	DC-600	5.6	0.10	9.5	34 24	25 11		18	

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



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