

LO₁ mixer

Surface Mount Frequency Mixer

ADE-30W+ ADE-30W

Level 7 (LO Power +7 dBm) 300 to 4000 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

Features

- low conversion loss, 6.8 dB typ.
- excellent L-R isolation, 35 dB typ.
- low profile package
- aqueous washable
- protected by U.S. patent 6,133,525

Applications

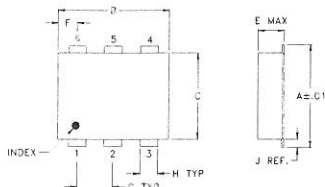
- cellular
- PCN
- instrumentation
- ISM

CASE STYLE: CD542
PRICE: \$8.95 ea. QTY (10)

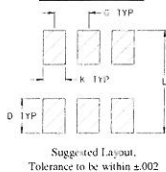
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Available Tape and Reel at no extra cost	
Reel Size	Devices/Reel
7"	10, 20, 50, 100, 200, 500
13"	500, 1000

Outline Drawing



PCB Land Pattern

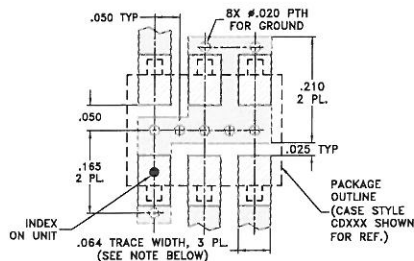


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
0.272	0.310	0.220	0.100	0.112	0.055	0.100
6.94	7.87	5.59	2.54	2.84	1.40	2.54

H	J	K	L	wt
0.030	0.026	0.065	0.300	grams
0.76	0.66	1.65	7.62	0.20

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



Electrical Specifications

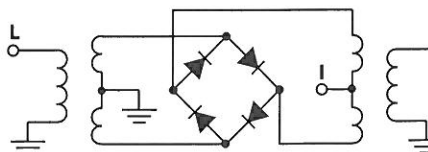
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)
		Typ.	Min.	Typ.	Min.	
300-4000	DC-950	35	17	16	7	12

1 dB COMP.: +1 dBm typ.
m= mid band [2f_L to f_U/2]

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-1 (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)	
						RF
200.00	230.00	5.93	51.00	48.50	2.80	8.08
350.00	360.00	4.87	45.33	40.83	1.43	6.17
500.00	530.00	4.84	42.83	37.83	1.13	3.26
850.00	880.00	5.24	38.17	45.00	2.46	2.51
1050.00	1080.00	6.02	38.50	34.67	3.69	2.04
1250.00	1280.00	5.80	40.67	23.67	2.51	1.95
1450.00	1480.00	5.34	38.50	19.00	2.20	2.17
1650.00	1680.00	6.12	40.83	15.66	2.28	2.28
1850.00	1880.00	6.38	40.00	14.77	2.46	2.37
2000.00	2030.00	6.66	39.00	13.50	2.86	2.51
2250.00	2280.00	7.17	35.50	12.83	3.68	2.93
2450.00	2480.00	6.79	33.67	12.00	3.57	3.17
2650.00	2680.00	6.39	37.00	11.16	3.68	3.36
2850.00	2880.00	5.69	40.67	10.50	2.86	3.95
3000.00	3030.00	5.30	37.17	11.17	2.01	3.17
3250.00	3280.00	5.16	34.00	12.16	1.65	2.07
3450.00	3480.00	5.27	33.33	14.50	1.43	2.20
3650.00	3680.00	5.75	33.67	16.50	1.56	2.61
3850.00	3880.00	6.57	33.66	17.00	2.61	3.17
4000.00	4030.00	7.38	33.33	16.16	3.35	4.26

Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

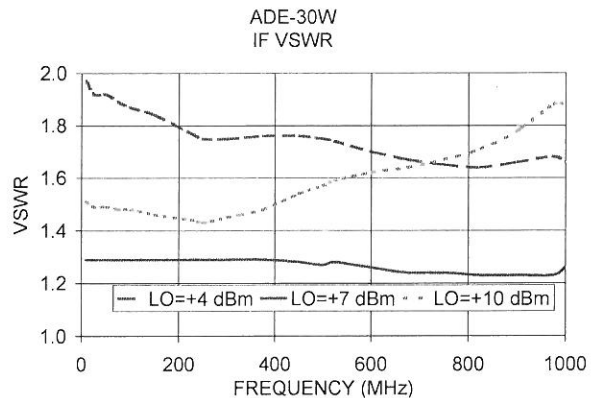
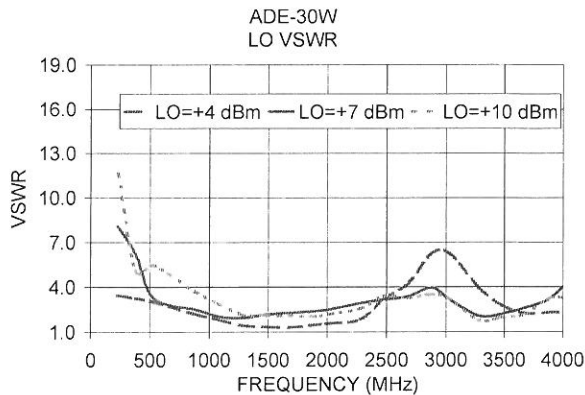
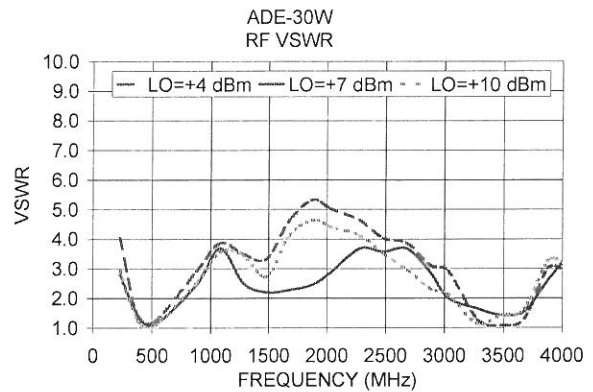
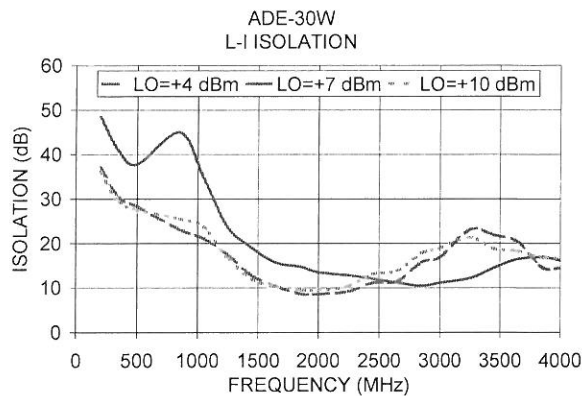
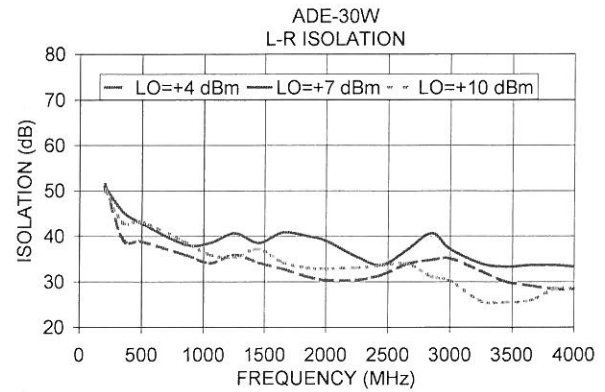
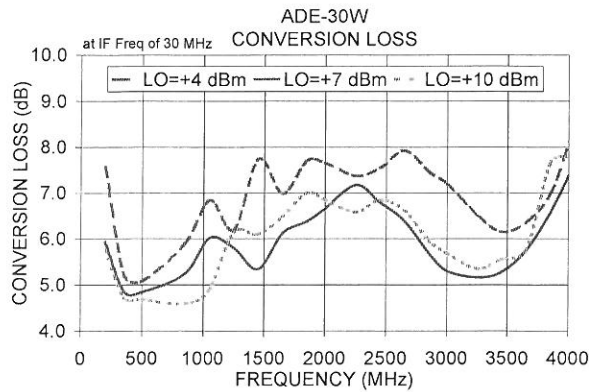
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Performance Charts



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