

Surface Mount Frequency Mixer



ADE-6

Level 7 (LO Power +7 dBm) 0.05 to 250 MHz

Maximum Ratings

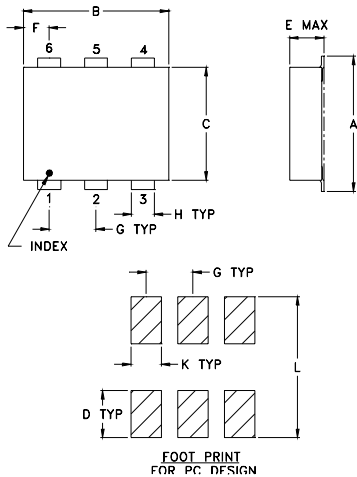
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Pin Configuration

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

EVALUATION BOARD P/N: TB-03

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H
.280	.310	.220	.100	.206	.055	.100	.030
7.11	7.87	5.58	2.54	5.23	1.40	2.54	0.76
J	K	L	wt.				
—	.065	.300	grams				
—	1.65	7.62	.45				

Features

- low conversion loss, 4.6 dB typ.
- excellent L-R isolation, 40 dB typ.
- low profile package 0.21" height (patent pending)
- solder plated leads for excellent solderability

Applications

- cellular
- instrumentation



CASE STYLE: CD637
PRICE: \$4.95 ea.
QTY.: (10-49)

Electrical Specifications

FREQUENCY MHz	CONVERSION LOSS dB	LO-RF ISOLATION, dB			LO-IF ISOLATION, dB			IP3@ center band Typ. (dBm)						
		L	M	U	L	M	U							
0.05 - 250	DC-200	62	49	40	30	40	20	58	44	45	24	25	15	10

1 dB Comp.+1 dBm

L = low range [f_L to $10 f_L$]

M = mid range [$10 f_L$ to $f_U/2$]

U = upper range [$f_U/2$ to f_U]

m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

Frequency MHz	Conversion Loss (dB)	Isolation L-R (dB)		Isolation L-I (dB)		VSWR LO port (:1)		VSWR RF port (:1)	
		LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.05	30.05	4.68	59.77	56.14	2.30	1.58			
10.00	40.00	4.13	66.00	52.10	2.52	1.27			
26.76	56.76	4.22	68.60	49.00	2.55	1.23			
40.00	70.00	4.19	66.80	46.10	2.58	1.21			
53.42	83.42	4.35	57.30	45.60	2.55	1.18			
60.00	90.00	4.32	54.40	44.40	2.61	1.18			
80.00	110.00	4.18	56.90	41.50	2.55	1.13			
100.00	130.00	4.49	48.70	40.80	2.65	1.14			
106.74	136.74	4.62	43.60	42.00	2.68	1.15			
120.00	150.00	4.62	40.20	40.00	2.80	1.12			
133.40	163.40	4.54	38.00	37.00	2.76	1.13			
140.00	170.00	4.64	37.00	35.70	2.80	1.15			
150.00	180.00	4.68	36.30	34.30	2.84	1.13			
160.06	190.06	4.75	53.20	32.70	2.68	1.07			
170.00	200.00	4.81	54.40	32.20	2.76	1.02			
186.72	216.72	5.14	54.50	31.20	2.92	1.16			
200.00	230.00	5.19	53.80	31.80	2.96	1.28			
213.38	243.38	5.26	61.60	31.60	2.92	1.41			
240.04	270.04	5.44	42.00	26.40	2.72	1.62			
250.00	280.00	5.44	39.40	24.50	2.65	1.69			

