

# Surface Mount Frequency Mixer



## ADE-6

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

### Maximum Ratings

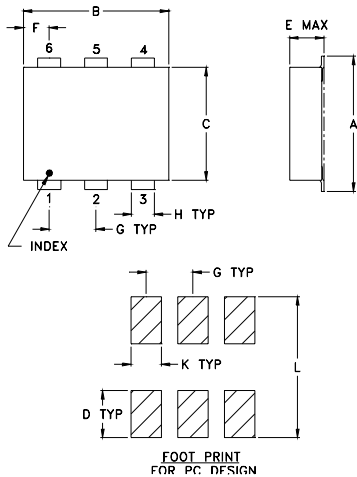
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

### 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	4.6	.05	7	8.4	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		Conversion Loss	Isolation L-R	Isolation L-I	VSWR LO port	VSWR RF port
RF	LO	(dB)	(dB)	(dB)	(:1)	(:1)
MHz	MHz	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

