

Surface Mount

Frequency Mixer

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



ADE-6



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

Maximum Ratings

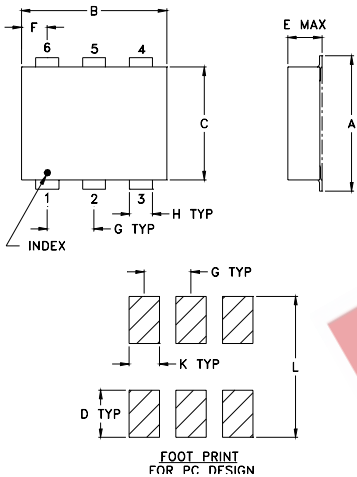
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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

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

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

Typical Performance Data

Frequency RF MHz	Frequency LO MHz	Conversion Loss (dB) LO +7dBm	Isolation L-R (dB) LO +7dBm	Isolation L-I (dB) LO +7dBm	VSWR LO port (:1)		VSWR RF port (:1)	
					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		

