

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

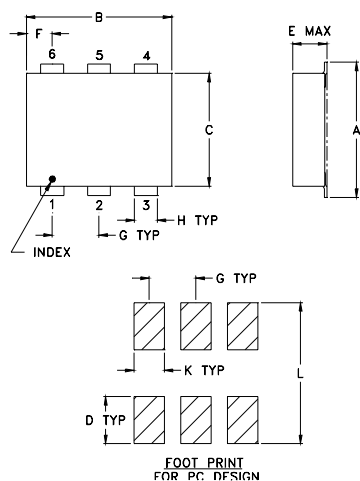
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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)				
LO/RF f _L -f _U	IF	Mid-Band		Total Range Max.		L Typ.	M Typ.	U Typ.		L Typ.	M Typ.	U Typ.						
		— x	m σ										Max.					
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]

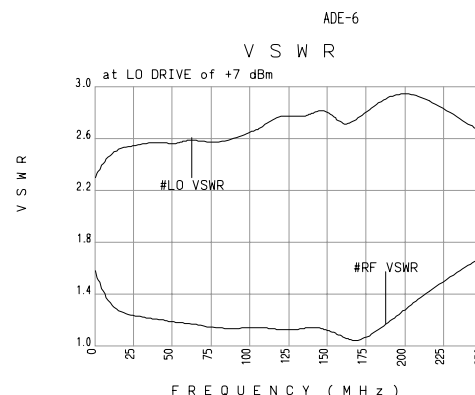
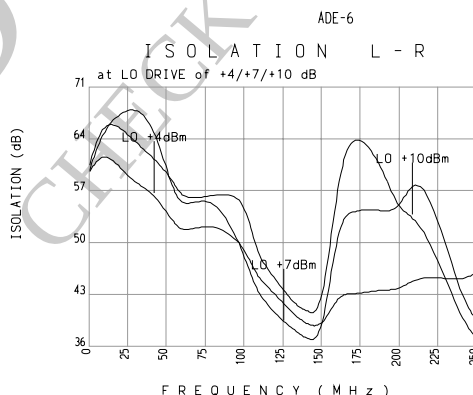
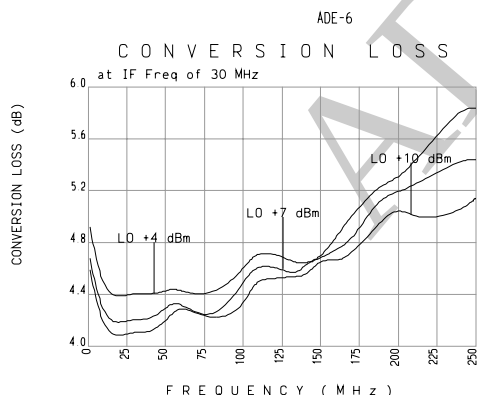
M = mid range [$10 f_L$ to $f_U/2$]

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

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

Typical Performance Data

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



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