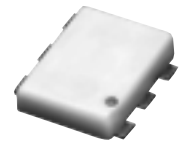


# Surface Mount Frequency Mixer

Level 7 (LO Power +7 dBm) 10 to 1000 MHz

**NEW!**

**ADEX-10**



CASE STYLE: CD542  
PRICE: \$2.95 ea.  
QTY.: (10-49)

## Maximum Ratings

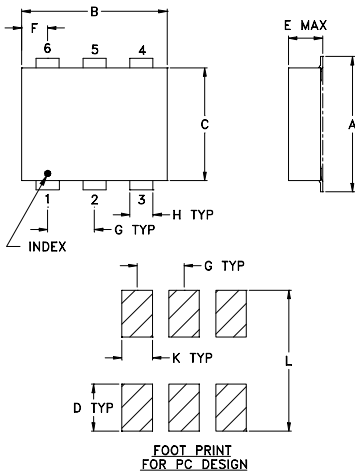
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

## 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	.112	.055	.100	.030
7.11	7.87	5.58	2.54	2.84	1.40	2.54	0.76

J	K	L	wt.
—	.065	.300	grams
—	1.65	7.62	.40

## Features

- **EX**cellent L-R isolation, 60 dB typ.
- **EX**cellent flat conversion loss  $\pm 0.2$  dB typ. over entire band
- low conversion loss, 6.8 dB typ.
- good VSWR, 2:1 typ. for LO, 1.4:1 typ. for RF, 1.8:1 typ. for IF
- good performance to 1500 MHz
- solder plated leads for excellent solderability
- low profile package, US Patent 6133525

## Applications

- cellular
- PCN

## Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS* (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3@ center band Typ. (dBm)	E FACTOR										
		L	M	U	L	M	U												
10-1000	DC-800	6.8	0.1	7.8	8.3	80	55	60	40	47	37	40	26	33	20	24	13	16	0.9

1dB Compr.: +1 dBm typ.  
E =  $[(IP3(dBm) - LO Power(dBm))/10]$   
\*Conversion loss increases 0.5 dB when IF is above 150 MHz.

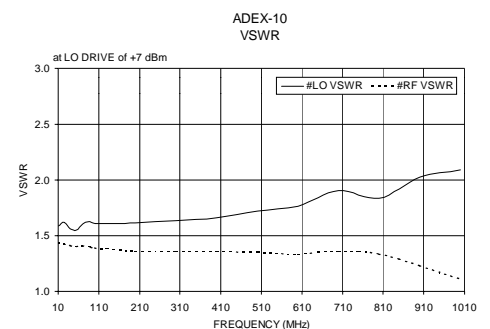
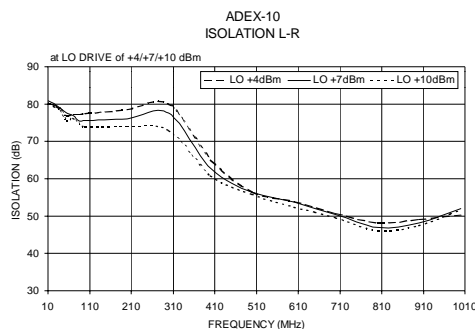
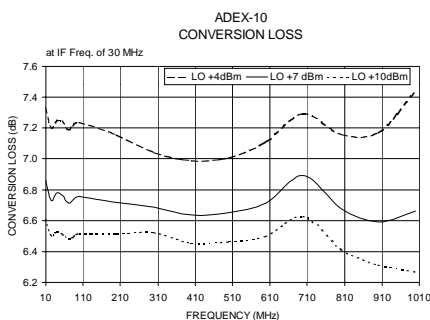
L = low range  $[f_i \text{ to } 10 f_i]$

M = mid range  $[10 f_i \text{ to } f_i/2]$

U = upper range  $[f_i/2 \text{ to } f_i]$

## Typical Performance Data

Frequency		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO port (:1)	VSWR RF port (:1)
RF MHz	LO MHz	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
10.00	40.00	6.86	80.91	62.86	1.59	1.43
25.00	55.00	6.73	80.18	55.33	1.62	1.43
40.00	70.00	6.78	78.88	51.04	1.56	1.41
55.00	85.00	6.77	77.53	47.55	1.55	1.40
70.00	100.00	6.72	77.00	45.78	1.61	1.41
85.00	115.00	6.74	75.52	44.15	1.62	1.40
100.00	130.00	6.76	75.63	42.50	1.61	1.39
200.00	230.00	6.72	76.11	36.93	1.61	1.36
300.00	330.00	6.69	77.57	34.10	1.64	1.35
400.00	430.00	6.64	62.74	33.06	1.66	1.35
500.00	530.00	6.65	56.43	32.02	1.72	1.35
600.00	630.00	6.71	53.73	30.71	1.77	1.34
700.00	730.00	6.89	50.35	29.89	1.91	1.36
800.00	830.00	6.68	47.01	28.37	1.83	1.34
900.00	930.00	6.59	48.15	26.00	2.02	1.23
1000.00	1030.00	6.66	52.10	23.48	2.09	1.11



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