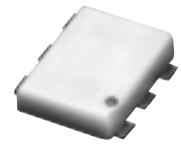


# Surface Mount Frequency Mixer

Level 4 (LO Power +4 dBm) 10 to 1000 MHz

**NEW!**

**ADEX-10L**



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

## Maximum Ratings

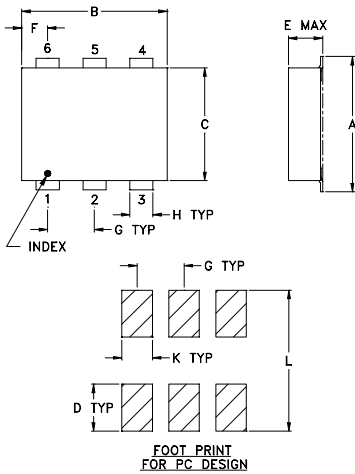
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

## 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.
- low conversion loss, 7.2 dB typ.
- flat conversion loss  $\pm 0.2$  dB typ. over entire band
- good VSWR, 1.5:1 typ. for LO&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	7.2	0.1	8.2	8.8	75	55	60	40	47	37	40	26	33	20	24	13	16	1.2

1dB Compr.: +1 dBm typ.  
E =  $[IP3(dBm) - LO Power(dBm)]/10$   
\*Conversion loss increases 0.8 dB when IF is above 150 MHz.

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

M = mid range [ $10 f_i$  to  $f_i/2$ ]

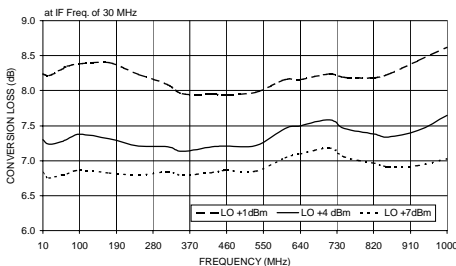
U = upper range [ $f_i/2$  to  $f_i$ ]

m = mid band [ $2f_i$  to  $f_i/2$ ]

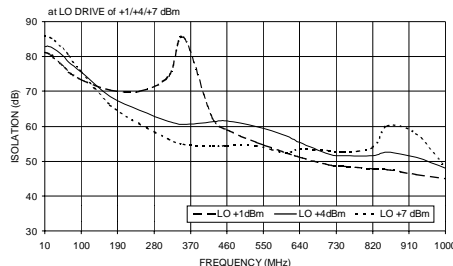
## Typical Performance Data

Frequency	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO port (:1)	VSWR RF port (:1)	
						RF MHz
10.00	40.00	7.30	82.88	58.83	1.18	1.54
25.00	55.00	7.23	82.79	51.06	1.13	1.54
55.00	85.00	7.27	80.30	44.57	1.12	1.53
70.00	100.00	7.31	78.35	42.47	1.14	1.53
100.00	130.00	7.37	75.43	39.36	1.15	1.51
172.00	202.00	7.31	68.52	34.38	1.21	1.48
244.00	274.00	7.21	64.68	31.33	1.25	1.46
316.00	346.00	7.20	61.44	29.83	1.29	1.44
352.00	382.00	7.13	60.51	29.38	1.28	1.43
424.00	454.00	7.19	61.30	28.92	1.28	1.43
460.00	490.00	7.21	61.56	28.63	1.27	1.42
532.00	562.00	7.21	59.88	28.24	1.27	1.39
604.00	634.00	7.46	57.30	27.79	1.29	1.40
640.00	670.00	7.49	55.44	27.54	1.30	1.40
712.00	742.00	7.58	52.02	26.70	1.34	1.40
748.00	778.00	7.46	51.61	25.74	1.38	1.40
820.00	850.00	7.38	51.53	23.84	1.38	1.39
856.00	886.00	7.34	52.51	22.81	1.42	1.39
928.00	958.00	7.43	51.02	21.76	1.48	1.35
1000.00	1030.00	7.65	47.97	21.23	1.57	1.27

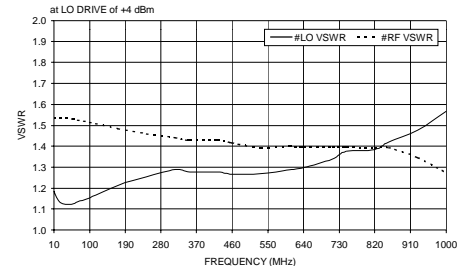
ADEX-10L  
CONVERSION LOSS



ADEX-10L  
ISOLATION L-R



ADEX-10L  
VSWR



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