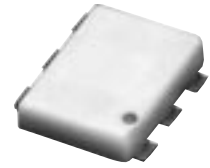


Surface Mount Frequency Mixer

Level 7 (LO Power +7 dBm) 5 to 1500 MHz

NEW!

ADE-5X



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

Maximum Ratings

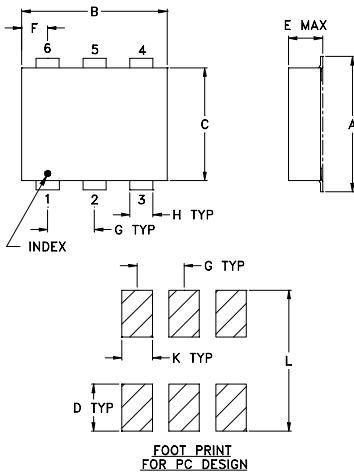
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Pin Configuration

LO	6
RF	2
IF	3
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

- low conversion loss, 6.2 dB typ.
- solder plated leads for excellent solderability
- low profile package, US Patent 6133525
- excellent L-R isolation, 33 dB typ.
- excellent L-I isolation, 40 dB typ.

Applications

- cellular
- PCN
- VHF & UHF
- communication receivers & transmitters

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	Total Range Max.	L	M	U	Total Range Max.				
5-1500	6.2	55	40	33	25	60	45	40	25	32	20	8	0.1

1dB Compr.: +1dBm typ.
E = [IP3(dBm)-LO Power(dBm)]/10

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

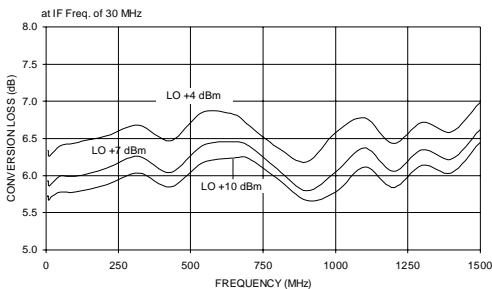
M = mid range [$10 f_i$ to $f_i/2$]

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

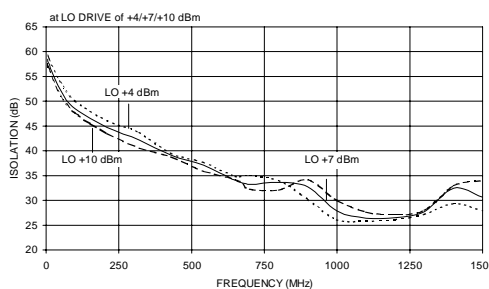
Typical Performance Data

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	(:1) LO +7dBm	(:1) LO +7dBm	
5.000	35.000	5.92	58.50	69.34	2.72	1.13
7.500	37.500	5.93	57.86	69.10	2.72	1.13
10.000	40.000	5.86	57.59	68.84	2.71	1.12
20.000	50.000	5.90	55.95	67.36	2.69	1.12
50.000	80.000	5.99	52.15	63.87	2.69	1.13
100.000	130.000	5.99	48.45	59.56	2.70	1.14
210.000	240.000	6.10	44.77	53.53	2.71	1.25
320.000	350.000	6.26	42.14	49.33	2.64	1.42
430.000	460.000	6.04	39.16	46.70	2.65	1.59
540.000	570.000	6.40	37.14	44.14	2.67	1.72
650.000	680.000	6.46	34.10	41.28	2.69	1.86
700.000	730.000	6.40	33.33	41.00	2.87	1.87
800.000	830.000	6.09	33.60	40.94	3.01	1.83
900.000	930.000	5.80	32.72	41.25	3.14	1.69
1000.000	1030.000	6.05	27.86	38.14	3.24	1.81
1100.000	1130.000	6.37	26.39	35.01	3.34	1.88
1200.000	1230.000	6.06	26.51	33.18	3.32	1.77
1300.000	1330.000	6.35	27.78	31.43	3.23	1.52
1400.000	1430.000	6.22	31.51	30.52	3.30	1.29
1500.000	1530.000	6.62	30.72	31.09	3.53	1.09

ADE-5X
CONVERSION LOSS



ADE-5X
ISOLATION L-R



ADE-5X
VSWR

