

# Surface Mount Frequency Mixer

Level 13 (LO Power +13 dBm) 5 to 2500 MHz

**NEW!**

## RMS-25MHW



CASE STYLE: TT240  
PRICE: \$7.95 ea.  
QTY.: (1-9)

### Maximum Ratings

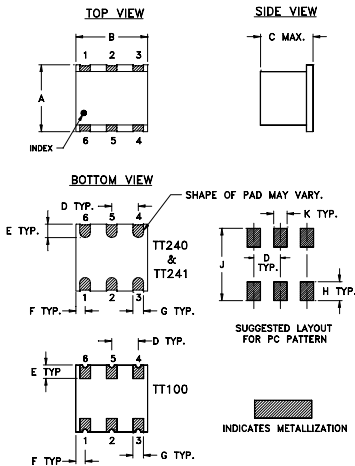
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

### Pin Configuration (w)

LO	1
RF	4
IF	5
GROUND	2,3,6

EVALUATION BOARD P/N: TB-03

### Outline Drawing



### Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H
.250	.31	.20	.100	.050	.055	.040	.070
6.35	7.87	5.08	2.54	1.27	1.40	1.02	1.78
J	K	wt.					
.270	.050	grams					
6.86	1.27	.40					

### Features

- low conversion loss, 7.0 dB typ.
- good L-R & L-I isolation, 32 dB typ.
- wide IF bandwidth, 5-2200 MHz

### Applications

- cellular
- UHF-TV
- PCN
- GSM

### 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							
5-2500	7.0	54	28	32	23	32	20	34	23	32	25	28	17	18	0.5

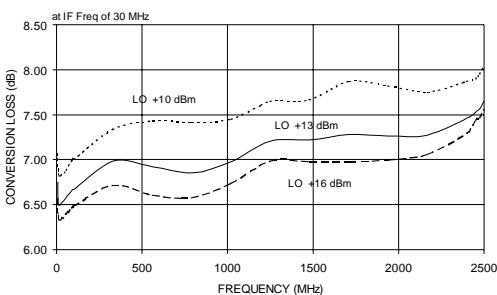
1dB Compr.: +9 dBm typ.  
E = [IP3(dBm)-LO Power(dBm)]/10

L = low range [ $f_i$  to  $10 f_i$ ]  
M = mid range [ $10 f_i$  to  $f_u/2$ ]  
U = upper range [ $f_u/2$  to  $f_u$ ]  
m = mid band [ $2f_i$  to  $f_u/2$ ]

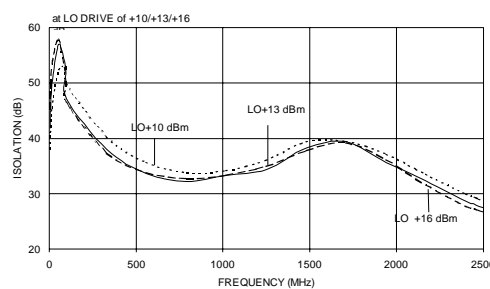
### Typical Performance Data

Frequency	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO port (:1)	VSWR RF port (:1)	
RF MHz	LO MHz	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	
5.00	35.00	6.75	41.77	32.87	2.31	1.26
7.00	37.00	6.64	43.90	34.54	2.28	1.07
9.00	39.00	6.57	45.70	35.70	2.29	1.06
15.00	45.00	6.50	49.51	37.55	2.27	1.06
55.00	85.00	6.58	56.94	37.73	2.26	1.04
95.00	125.00	6.68	52.10	37.07	2.25	1.08
100.00	130.00	6.67	47.09	36.14	2.15	1.16
330.00	360.00	6.98	38.07	36.21	2.04	1.24
560.00	590.00	6.92	33.58	34.52	1.90	1.33
790.00	820.00	6.86	32.21	32.04	1.83	1.47
1020.00	1050.00	6.98	33.29	31.85	1.68	1.63
1250.00	1280.00	7.21	34.33	30.26	1.58	1.77
1480.00	1510.00	7.22	38.26	32.39	1.42	1.77
1710.00	1740.00	7.28	39.36	33.11	1.30	1.65
1940.00	1970.00	7.27	35.60	29.25	1.31	1.62
2170.00	2200.00	7.28	32.25	28.84	1.44	1.68
2400.00	2430.00	7.46	28.58	28.58	1.61	1.73
2450.00	2480.00	7.53	28.06	28.42	1.63	1.69
2475.00	2505.00	7.57	27.70	28.35	1.66	1.61
2500.00	2530.00	7.65	27.47	28.19	1.61	1.60

RMS-25MHW  
CONVERSION LOSS



RMS-25MHW  
ISOLATION L-R



RMS-25MHW  
VSWR

