

# Frequency Mixer

Level 17 (LO Power +17 dBm) 5 to 1000 MHz

TFM-2H



CASE STYLE: B02

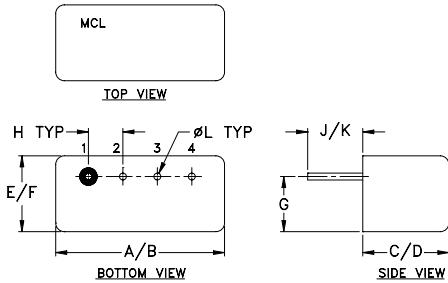
## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

## Pin Connections

LO	4
RF	1
IF	2
GROUND	3
CASE GROUND	3

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F
.480	.500	.240	.255	.210	.230
12.19	12.70	6.10	6.48	5.33	5.84
G	H	J	K	L	wt
.16	.100	.14	.20	.020	grams
4.06	2.54	3.56	5.08	0.51	1.9

## Features

- low conversion loss, 6.12 dB typ.
- wideband, 5 to 1000 MHz
- good L-R isolation, 40 dB typ.
- rugged welded construction
- hermetically sealed

## Applications

- VHF/UHF
- aviation
- cellular
- ISM/GSM

## Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total Range Max.	Max.	L		M		U		L		M		U	
$f_L$ - $f_U$		$\bar{X}$	$\sigma$			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
5-1000	DC-1000	6.12	0.12	7.0	10.0	50	45	40	30	30	20	45	40	35	25	25	17

1 dB COMP.: +14 dBm typ.

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

## Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
5.00	35.00	5.75	73.03	64.57	1.24	1.51
35.15	65.15	5.75	53.95	50.91	1.10	1.53
65.30	95.30	5.78	47.75	44.94	1.10	1.52
125.61	95.61	5.83	45.94	42.85	1.09	1.44
185.91	155.91	5.88	41.73	38.74	1.09	1.43
216.06	186.06	5.87	40.07	37.26	1.10	1.39
276.37	246.37	5.70	37.49	34.59	1.11	1.38
336.67	306.67	5.62	35.70	32.97	1.11	1.40
396.98	366.98	5.78	35.50	32.29	1.12	1.37
457.28	427.28	6.15	33.92	30.55	1.13	1.36
517.58	487.58	5.88	34.70	29.07	1.15	1.37
547.74	517.74	5.91	35.38	29.45	1.15	1.39
608.04	578.04	6.36	34.75	28.29	1.16	1.38
668.34	638.34	6.50	34.53	27.06	1.17	1.38
728.65	698.65	6.30	33.69	25.41	1.20	1.36
788.95	758.95	6.43	32.39	25.21	1.22	1.45
849.26	819.26	7.56	32.23	24.28	1.26	1.49
909.56	879.56	8.59	32.46	23.91	1.34	1.52
969.86	939.86	8.55	32.66	24.30	1.46	1.54
1000.00	970.00	8.57	32.20	24.05	1.62	1.53

## Electrical Schematic

