

Frequency Mixer

Level 13 (LO Power +13 dBm) 0.5 to 2000 MHz

TFM-12MH+



CASE STYLE: B13

PRICE: \$51.20 ea. QTY (1-9)

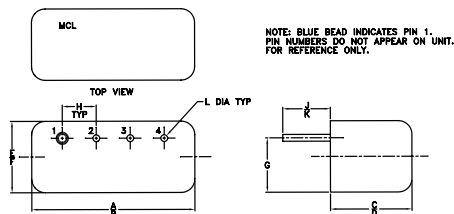
Maximum Ratings

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

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	.390	.405	.210	.230
12.19	12.70	9.91	10.29	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	2.3

Features

- low conversion loss, 6.99 dB typ.
- wideband, 0.5 to 2000 MHz
- rugged welded construction
- hermetically sealed

Applications

- satellite distribution
- cellular
- GPS
- defense & federal communications

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U	
f _L -f _U		\bar{X}	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.5-2000	0.2-600	6.99	0.16	8.0	9.5	60	45	35	30	30	25	55	40	30	25	25	20

1 dB COMP.: +9 dBm typ.

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

M = mid range [$10 f_L$ to $f_U/2$]
U = upper range [$f_U/2$ to f_U]

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
0.50	30.50	5.54	61.48	64.69	4.43	1.96
5.00	35.00	5.64	61.51	64.42	4.51	1.88
20.00	50.00	5.60	61.26	63.51	4.59	2.04
50.00	80.00	5.85	58.01	56.01	4.43	1.91
100.00	70.00	5.85	55.76	52.77	4.31	1.86
222.67	192.67	6.55	47.09	43.57	4.70	1.78
370.78	340.78	7.22	43.20	40.28	4.92	1.67
500.00	470.00	7.60	39.53	35.85	4.52	1.58
592.94	562.94	7.49	38.74	33.96	4.48	1.56
741.06	711.06	7.43	37.61	32.39	3.42	1.43
889.17	859.17	6.76	33.34	29.78	2.40	1.27
1037.30	1007.30	6.12	34.59	30.40	1.85	1.19
1111.30	1081.30	6.07	35.77	31.30	1.61	1.18
1259.40	1229.40	6.35	37.02	32.22	1.35	1.24
1333.50	1303.50	6.58	36.62	31.95	1.25	1.31
1481.60	1451.60	7.15	35.23	34.09	1.32	1.42
1555.70	1525.70	7.34	34.20	39.23	1.43	1.43
1703.80	1673.80	7.82	35.34	39.62	1.79	1.53
1851.90	1821.90	8.07	38.03	35.98	2.62	1.59
2000.00	1970.00	8.50	32.12	36.12	3.22	1.58

Electrical Schematic

