

Plug-In

Frequency Mixer

Level 17 (LO Power +17 dBm) 0.1 to 250 MHz

TFM-3H



CASE STYLE: B02

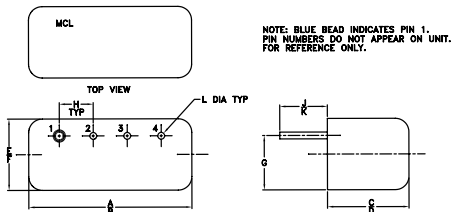
Maximum Ratings

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

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, 4.58 dB typ.
- good L-R isolation, 40 dB typ.
- rugged welded construction
- hermetically sealed

Applications

- VHF
- aviation
- maritime, defense & federal communications

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}	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.1-250	DC-250	4.58	0.11	7.0	8.5	50	45	40	30	28	23	45	40	35	25	26	20

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
0.10	30.10	5.43	66.42	66.28	1.40	1.51
5.00	35.00	4.99	61.64	64.07	1.40	1.46
10.00	40.00	4.91	60.33	61.62	1.38	1.52
20.00	50.00	4.94	61.22	60.51	1.39	1.51
34.57	64.57	4.92	57.23	56.07	1.39	1.52
50.00	80.00	4.92	53.98	52.73	1.39	1.48
60.42	90.42	4.92	52.33	50.92	1.38	1.45
69.04	99.04	4.87	51.05	49.22	1.38	1.47
86.27	56.27	4.80	48.52	46.16	1.35	1.43
100.00	70.00	4.79	46.72	44.44	1.35	1.41
103.51	73.51	4.84	46.41	44.07	1.33	1.44
129.36	99.36	4.89	43.29	41.27	1.31	1.45
146.59	116.59	4.91	41.82	40.17	1.30	1.50
155.21	125.21	4.90	41.17	39.68	1.29	1.46
172.44	142.44	5.00	39.95	38.86	1.24	1.46
189.68	159.68	5.08	39.60	38.24	1.22	1.45
224.15	194.15	5.21	37.56	36.93	1.21	1.47
232.76	202.76	5.26	36.71	36.82	1.18	1.52
241.38	211.38	5.24	35.87	36.43	1.16	1.53
250.00	220.00	5.23	35.46	36.00	1.14	1.52

Electrical Schematic

