

Frequency Mixer

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

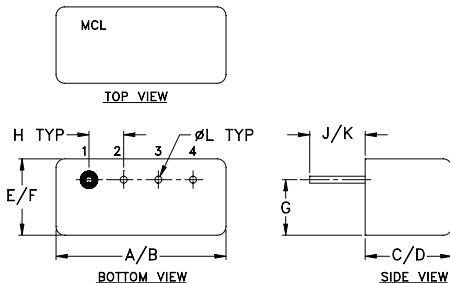
Maximum Ratings

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

Applications

- VHF
- aviation
- maritime, defense & federal communications

TFM-3H+



CASE STYLE: B02
PRICE: \$31.50 ea. QTY (1-9)

+RoHS Compliant

The +Suffix identifies 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		Max.	Total Range Max.	L	M	U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
		$\bar{X}$	σ														
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.

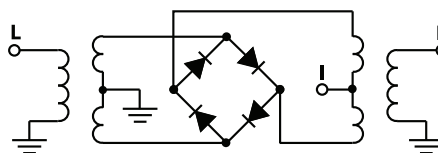
L = low range [f_L to $10 f_L$]
m = mid band [$2f_L$ to $f_U/2$]

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 +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



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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