

Plug-In

Frequency Mixer

Level 13 (LO Power +13 dBm) 2 to 600 MHz

TUF-1MH+



CASE STYLE: B02
PRICE: \$10.20 ea. QTY (10)

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

Features

- low conversion loss, 6.3 dB typ.
- high isolation, 50 dB typ. L-R, 48 dB typ. L-I
- rugged welded construction

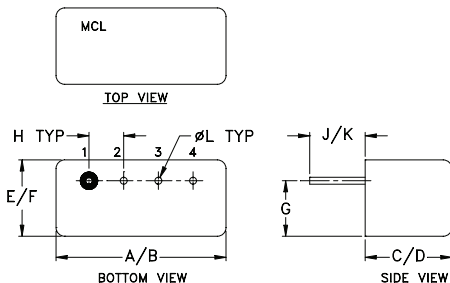
Applications

- VHF/UHF
- defense & federal communications

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

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.							
2-600	DC-600	6.3	0.12	7.0	8.0	68	50	50	30	43	25	65	45	48	30	37	22

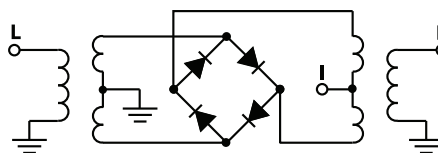
1 dB COMP.: +9 dBm typ.

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)	VSWR RF Port (:1)	Frequency (MHz)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO Port (:1)
RF	LO	LO +13dBm	LO +13dBm	LO	LO +13dBm	LO +13dBm	LO +13dBm
2.00	32.00	6.69	1.71	2.30	72.70	67.41	2.47
4.00	34.00	6.16	1.37	5.30	70.19	66.64	2.38
10.00	40.00	5.88	1.15	10.30	66.20	64.23	2.34
16.00	46.00	5.86	1.10	15.30	63.06	61.97	2.28
33.00	63.00	5.84	1.05	20.30	60.88	60.01	2.30
50.00	80.00	5.81	1.03	30.30	58.09	57.73	2.22
101.00	131.00	5.84	1.03	40.10	56.62	56.49	2.23
171.00	201.00	5.97	1.07	80.00	50.45	50.68	2.16
211.00	241.00	6.00	1.09	114.00	48.55	49.14	2.21
271.00	301.00	5.99	1.12	161.00	46.23	47.36	2.14
311.00	341.00	6.02	1.14	201.00	44.75	46.87	2.19
331.00	361.00	6.00	1.16	241.00	43.64	46.01	2.11
355.00	385.00	6.01	1.17	301.00	41.84	43.65	2.18
398.00	428.00	6.00	1.18	346.00	40.23	41.40	2.19
441.00	471.00	6.08	1.19	406.50	39.17	39.27	2.18
484.00	514.00	6.16	1.22	449.50	38.01	37.50	2.14
505.50	535.50	6.14	1.23	471.00	37.37	36.34	2.18
548.50	578.50	6.19	1.26	514.00	36.67	36.01	2.20
570.00	600.00	6.16	1.27	557.00	36.02	35.09	2.25
600.00	630.00	6.30	1.30	600.00	35.65	33.93	2.18

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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