

Plug-In

# Frequency Mixer

## TUF-1H+

Level 17 (LO Power +17 dBm) 2 to 600 MHz



### 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

### Features

- wideband, 2 to 600 MHz
- low conversion loss, 5.90 dB typ.
- high L-R isolation, 50 dB typ.
- rugged welded construction

### Applications

- VHF/UHF
- transmitters/receivers
- defense & federal communications

CASE STYLE: B02  
PRICE: \$12.45 ea. QTY (1-9)

**+ 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.*

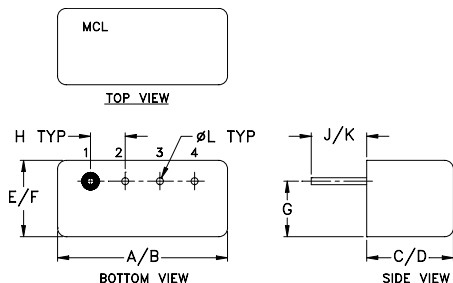
### Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3 at center band (dBm)						
		L	M	U	L	M	U							
2-600	DC-600	68	50	50	30	43	25	62	45	48	30	33	22	26

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  $f_U/2$ ]

### Outline Drawing



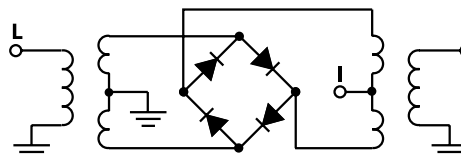
### Outline Dimensions (inch/mm)

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

### 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
2.00	32.00	6.30	62.98	52.28	1.22	1.67
5.00	35.00	5.95	62.06	52.79	1.10	1.60
10.00	40.00	5.92	60.47	52.35	1.03	1.63
20.00	50.00	5.91	57.14	51.13	1.02	1.61
34.13	64.13	5.81	53.27	49.30	1.04	1.58
50.00	80.00	5.72	50.24	47.27	1.06	1.57
66.26	96.26	5.66	48.03	45.61	1.07	1.55
82.33	104.66	5.71	46.33	44.27	1.08	1.54
100.00	120.00	5.63	44.99	43.26	1.09	1.57
130.52	160.52	5.61	43.18	41.91	1.10	1.55
162.65	204.65	5.61	41.46	40.45	1.10	1.55
200.00	270.00	5.60	40.12	39.22	1.08	1.60
259.04	342.04	5.42	38.10	37.51	1.07	1.67
307.24	409.24	5.62	37.54	36.13	1.06	1.70
355.43	486.43	5.86	37.41	36.94	1.05	1.76
387.56	516.56	5.92	36.35	35.99	1.04	1.82
435.76	567.76	5.81	35.35	33.91	1.05	1.84
467.89	600.00	5.90	36.34	33.81	1.06	1.85
483.95	600.00	6.08	36.44	33.54	1.08	1.87
500.00	600.00	6.27	36.27	33.21	1.09	1.90
600.00	600.00	6.18	36.36	33.38	1.09	1.89

### Electrical Schematic



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Page 1 of 2

