

Plug-In

Frequency Mixer

TUF-2LH+

Level 10 (LO Power +10dBm) 50 to 1000



Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
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, 5.9 dB typ.
- high isolation, 44 dB typ. L-R, 50 dB typ. L-I
- wideband, 50 to 1000 MHz
- rugged welded construction

Applications

- VHF/UHF
- cellular ISM/GSM

CASE STYLE: B02
PRICE: \$10.45 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.

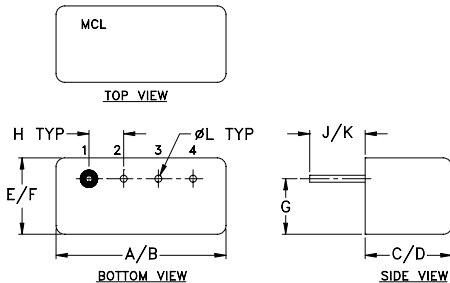
Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)								
LO/RF	IF	Mid-Band m		Total Range	L	M	U	L	M	U							
f_L-f_U		\bar{X}	σ	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.							
50-1000	DC-1000	5.9	0.30	7.0	8.5	58	40	44	30	39	25	60	35	50	25	38	20

1 dB COMP.: +5 dBm typ.

L = 50-100 MHz M = 100-500 MHz U = upper range [$f_U/2$ to f_U]
m = mid band [$2f_L$ to $f_U/2$]

Outline Drawing



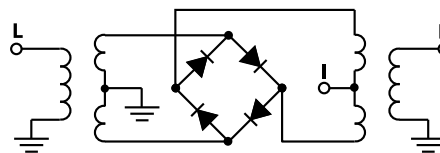
Outline Dimensions (inch/mm)

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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
5.00	35.00	5.97	52.74	87.33	1.25	2.82
10.00	40.00	5.89	52.59	81.78	1.18	2.63
20.00	50.00	5.90	52.51	76.47	1.16	2.68
50.00	80.00	5.96	52.73	68.83	1.18	2.62
95.45	65.45	6.01	52.59	68.37	1.19	2.50
100.00	70.00	6.04	52.35	67.59	1.21	2.50
185.91	155.91	5.82	52.03	63.99	1.22	2.40
200.00	170.00	5.77	52.24	62.23	1.23	2.48
276.36	246.36	5.75	51.93	58.87	1.23	2.38
366.82	336.82	5.81	52.59	53.25	1.22	2.39
457.27	427.27	5.88	47.42	55.40	1.21	2.42
487.42	457.42	5.91	45.90	49.79	1.20	2.42
500.00	470.00	5.94	48.30	46.54	1.19	2.43
547.73	517.73	6.07	57.22	40.10	1.18	2.44
638.18	608.18	6.63	48.69	37.95	1.15	2.49
728.64	698.64	7.20	42.92	36.76	1.11	2.47
819.09	789.09	7.24	41.04	32.27	1.05	2.47
909.55	879.55	7.27	41.87	29.47	1.15	2.57
969.85	939.85	7.69	44.77	28.21	1.30	2.60
1000.00	970.00	7.81	50.08	26.90	1.38	2.59

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

For detailed performance specs & shopping online see web site

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