

Plug-In, Low Noise

Active Mixer

Level 6 (LO Power +6 dBm) 10 to 500 MHz

UNCL-L1H



CASE STYLE: A01
PRICE: \$33.20 ea. QTY (1-9)

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	1
RF	7
IF	8
DC	4
GROUND	3,5,6
CASE GROUND	3,5,6
NOT USED	2

Features

- excellent conversion loss, 5.73 dB typ.
- good L-R isolation, 36 dB typ., L-I isolation, 25 dB typ.
- rugged welded construction
- hermetically sealed
- protected by US Patent, 6,943,629

Applications

- VHF/UHF
- transmitters

Electrical Specifications

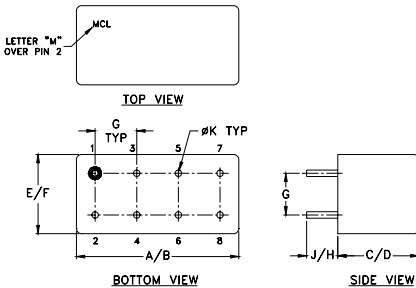
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						INPUT POWER (dBm) 1 dB Compr.	DC POWER	
LO/RF	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U		Typ.	Current (mA)	
f_L - f_U		$\overline{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.			
10-500	DC-500	5.73	0.07	8.0	8.5	45	25	36	20	24	17	32	18	25	15	18	10	14	12	60

Up to 14 dBm RF

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]

Outline Drawing



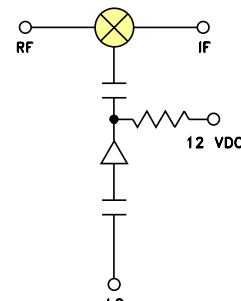
Outline Dimensions (inch mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		5.2

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 +6dBm	LO +6dBm	LO +6dBm	LO +6dBm	LO +6dBm
10.00	40.00	6.14	44.45	37.68	1.08	1.39
20.00	50.00	6.09	44.60	36.60	1.04	1.29
50.00	80.00	6.15	42.60	31.75	1.02	1.32
53.24	83.24	6.19	42.54	31.32	1.02	1.32
96.47	66.47	6.09	39.39	27.03	1.01	1.38
100.00	70.00	6.12	38.82	26.75	1.01	1.39
139.71	109.71	6.08	36.47	24.55	1.01	1.49
182.94	152.94	6.04	33.97	22.60	1.02	1.61
200.00	170.00	6.01	32.86	22.00	1.02	1.65
226.18	196.18	6.05	31.55	21.33	1.03	1.72
240.59	210.59	6.01	31.07	20.98	1.03	1.76
250.00	220.00	5.99	31.07	20.64	1.04	1.78
269.41	239.41	6.03	29.74	20.00	1.04	1.82
312.65	282.65	6.06	29.04	18.97	1.06	1.93
355.88	325.88	6.07	29.44	17.86	1.08	2.04
399.12	369.12	6.05	28.97	17.51	1.09	2.14
442.35	412.35	6.13	28.43	16.75	1.12	2.25
471.18	441.18	6.22	27.40	16.76	1.14	2.33
485.59	455.59	6.26	26.90	16.94	1.15	2.32
500.00	470.00	6.26	26.42	17.47	1.16	2.35

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs
& shopping online see web site

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I/F/R/F MICROWAVE COMPONENTS

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