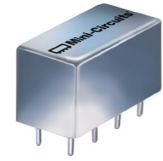


Plug-In, Low Noise Active Mixer

UNCL-L1H

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



CASE STYLE: A01

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

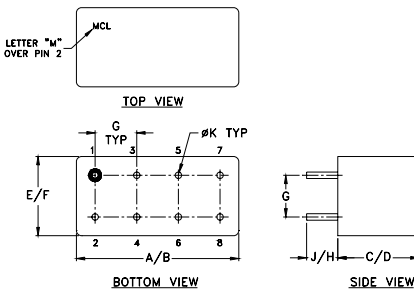
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						INPUT POWER (dBm) 1 dB Compr.	DC POWER				
		Mid-Band m		Total Range Max.		L	M	U	L	M	U	Typ.	Current (mA)						
10-500	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 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



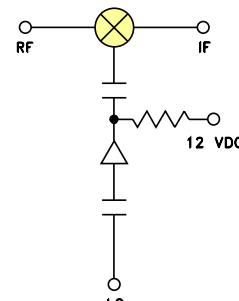
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.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
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

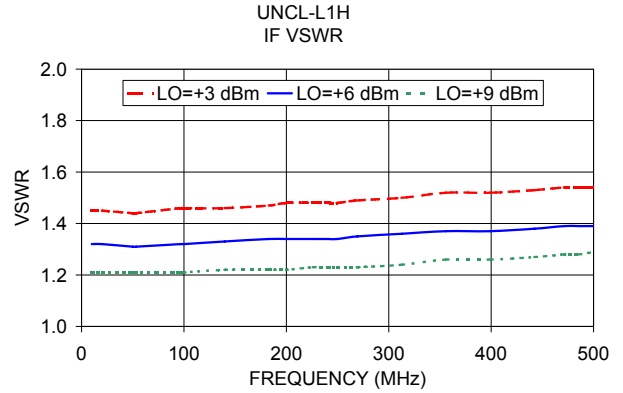
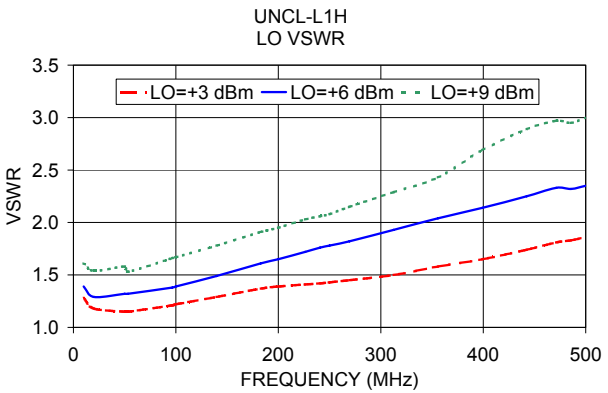
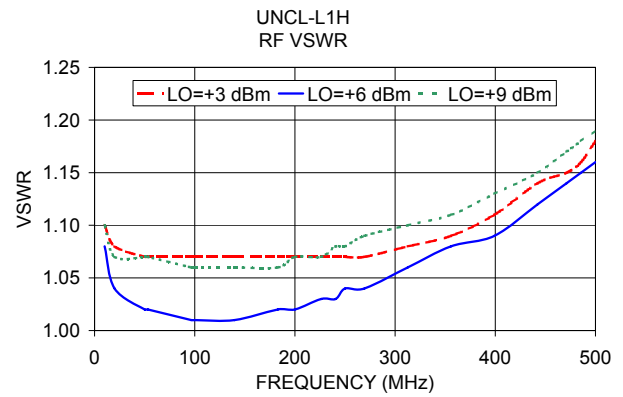
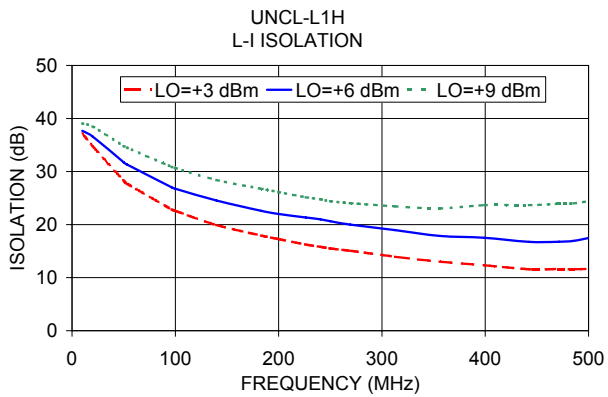
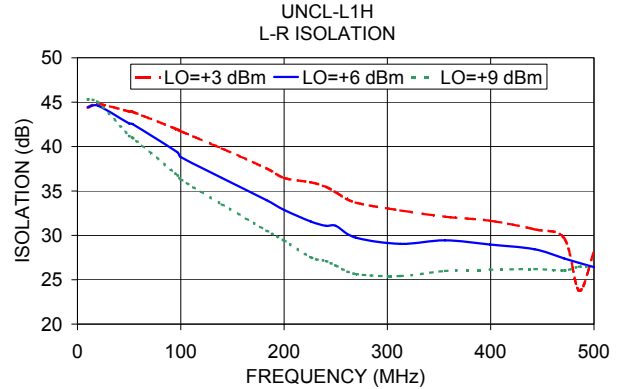
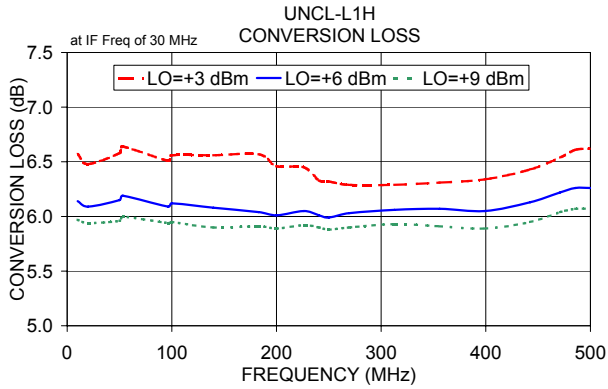
Electrical Schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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