

Plug-In, Low Noise Active Mixer

UNCL-L1+ UNCL-L1

Level -4 (LO Power -4 dBm) 10 to 500 MHz



CASE STYLE: A01
PRICE: \$28.20 ea. QTY (1-9)

**+ RoHS compliant in accordance
with EU Directive (2002/95/EC)**

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

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

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, 35 dB typ., L-I isolation, 23 dB typ.
- rugged welded construction
- hermetically sealed
- protected by U.S Patent 6,943,629

Applications

- VHF/UHF
- transmitters

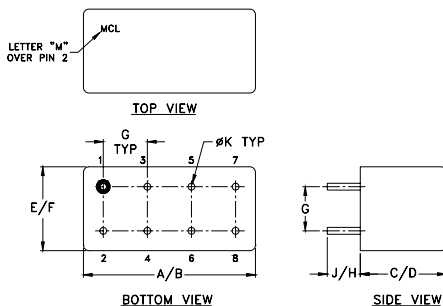
Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						INPUT POWER (dBm)	DC POWER	
LO/RF f_L - f_U	IF	Mid-Band m			Total Range Max.	L	M		U		L	M		U		1 dB Compr.	Current (mA)			
		\bar{X}	σ	Max.			Typ.	Min.	Typ.	Min.		Typ.	Min.	Typ.	Min.		Typ.	Min.	Typ.	Volt
10-500	DC-500	5.73	0.8	8.0	8.5	45	30	35	20	25	17	32	20	23	15	18	12	1	12	35

Up to 1 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



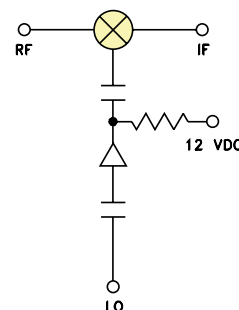
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.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)
10.00	40.00	62.39	50.19	1.11	1.43
20.00	50.00	57.15	44.63	1.07	1.34
50.00	80.00	49.25	36.60	1.06	1.39
53.24	83.24	48.94	36.12	1.06	1.39
96.47	66.47	44.45	31.86	1.05	1.49
100.00	70.00	44.16	31.79	1.06	1.50
139.71	109.71	42.08	29.24	1.07	1.62
182.94	152.94	39.66	26.97	1.09	1.81
200.00	170.00	38.64	26.20	1.10	1.87
226.18	196.18	37.39	25.18	1.11	1.97
240.59	210.59	37.10	24.79	1.13	2.03
250.00	220.00	36.64	24.38	1.13	2.06
269.41	239.41	35.64	23.95	1.14	2.15
312.65	282.65	34.48	23.15	1.17	2.26
355.88	325.88	33.01	22.80	1.21	2.36
399.12	369.12	32.87	23.17	1.25	2.43
442.35	412.35	32.64	23.55	1.30	2.46
471.18	441.18	30.96	25.05	1.34	2.48
485.59	455.59	30.40	25.57	1.36	2.48
500.00	470.00	29.18	26.74	1.38	2.48

Electrical Schematic



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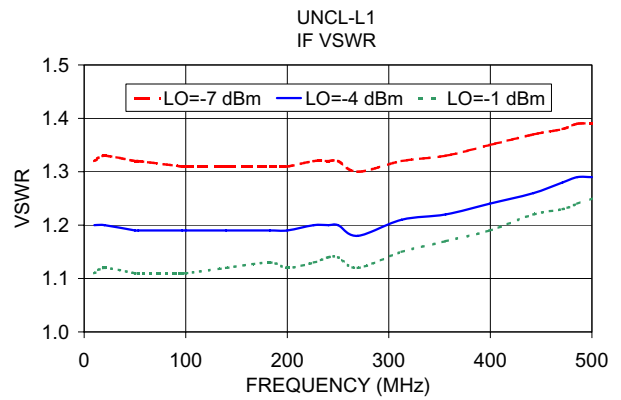
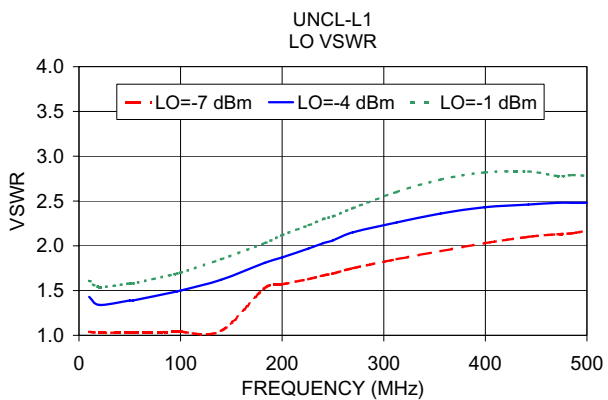
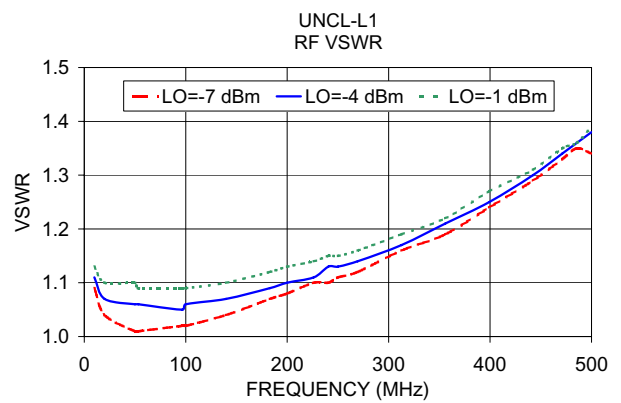
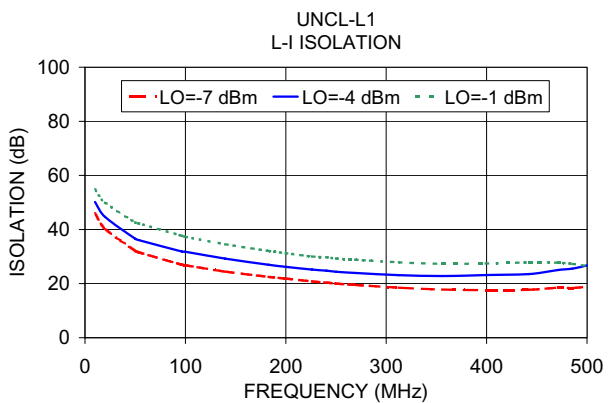
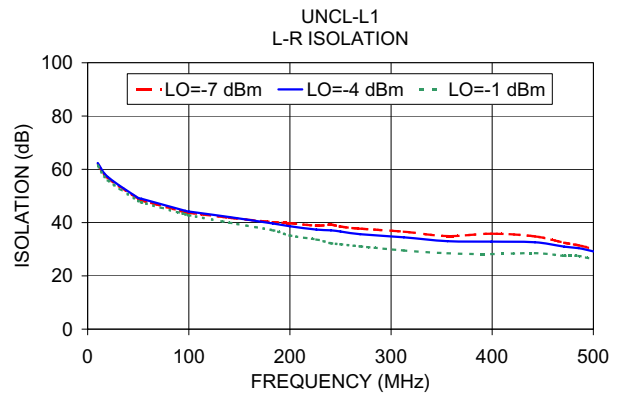
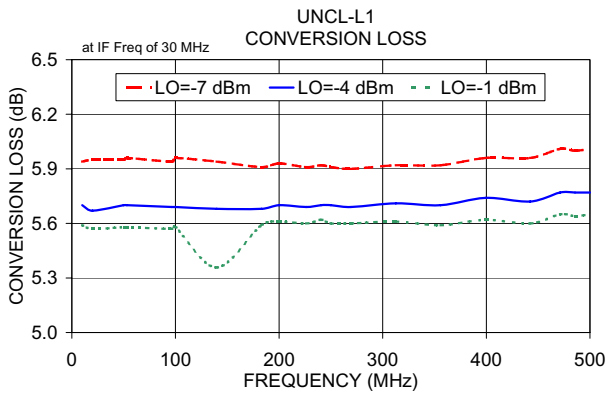
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RF/IF MICROWAVE COMPONENTS

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Performance Charts

UNCL-L1+ UNCL-L1



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