

Plug-In, Low Noise Active Mixer

NON-CATALOG

UNCL-L1+

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

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

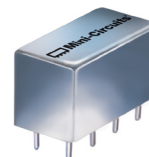
LO	1
RF	7
IF	8
DC	4
GROUND	3,5,6
CASE GROUND	3,5,6
NOT USED	2

Features

- excellent conversion loss, 5.73 dB typ.
- good L-R isolation, 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



CASE STYLE: A01

Price: Contact Sales Dept.

+RoHS Compliant

The +Suffix identifies 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)						INPUT POWER (dBm) 1 dB Compr.	DC POWER	
LO/RF	IF	Mid-Band m			Total Range Max.	L		M		U		L		M		U			Current (mA)	
f_L - f_U		$\bar{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.			Typ.
10-500	DC-500	5.73	0.08	8.0	8.5	45	30	35	20	25	17	32	20	23	15	18	12	1	12	35

Up to 1 dBm typ.

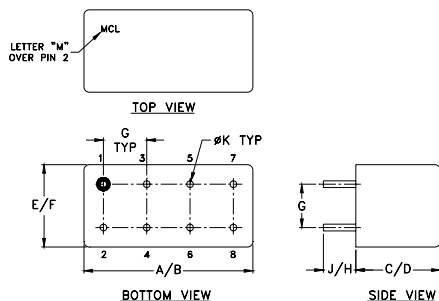
L = low range [f_L to $10 f_L$]

m = mid 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



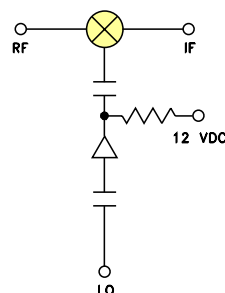
Outline Dimensions (inch mm)

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 -4dBm	LO -4dBm	LO -4dBm	LO -4dBm	LO -4dBm
10.00	40.00	5.70	62.39	50.19	1.11	1.43
20.00	50.00	5.67	57.15	44.63	1.07	1.34
50.00	80.00	5.70	49.25	36.60	1.06	1.39
53.24	83.24	5.70	48.94	36.12	1.06	1.39
96.47	66.47	5.69	44.45	31.86	1.05	1.49
100.00	70.00	5.69	44.16	31.79	1.06	1.50
139.71	109.71	5.68	42.08	29.24	1.07	1.62
182.94	152.94	5.68	39.66	26.97	1.09	1.81
200.00	170.00	5.70	38.64	26.20	1.10	1.87
226.18	196.18	5.69	37.39	25.18	1.11	1.97
240.59	210.59	5.70	37.10	24.79	1.13	2.03
250.00	220.00	5.70	36.64	24.38	1.13	2.06
269.41	239.41	5.69	35.64	23.95	1.14	2.15
312.65	282.65	5.71	34.48	23.15	1.17	2.26
355.88	325.88	5.70	33.01	22.80	1.21	2.36
399.12	369.12	5.74	32.87	23.17	1.25	2.43
442.35	412.35	5.72	32.64	23.55	1.30	2.46
471.18	441.18	5.77	30.96	25.05	1.34	2.48
485.59	455.59	5.77	30.40	25.57	1.36	2.48
500.00	470.00	5.77	29.18	26.74	1.38	2.48

Electrical Schematic



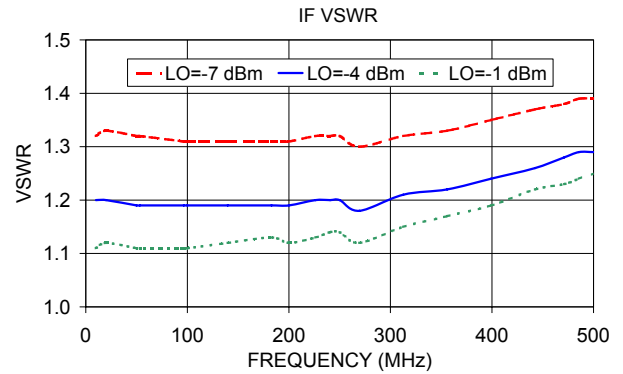
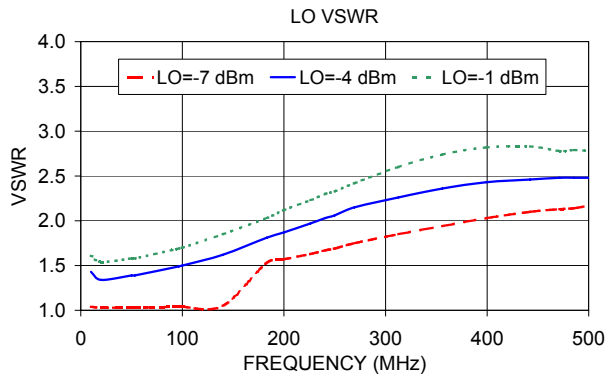
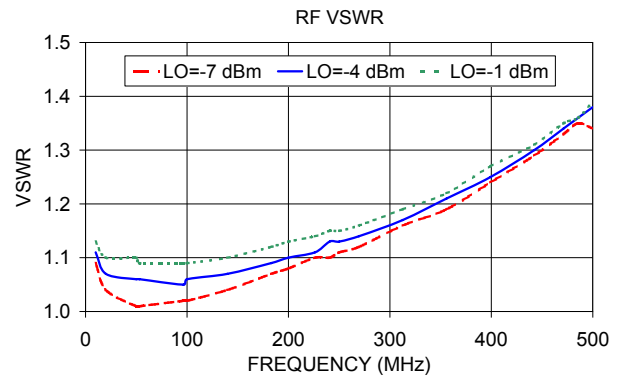
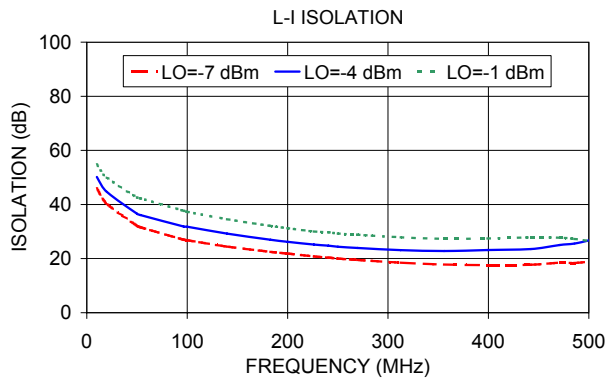
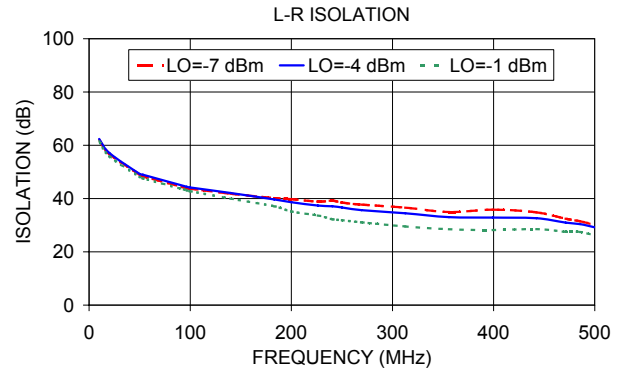
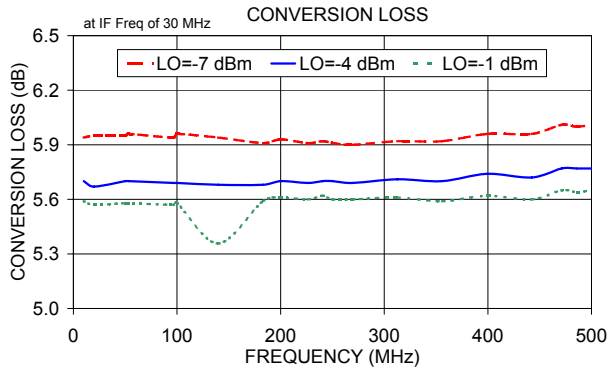
Notes

- 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.
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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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Page 1 of 2



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