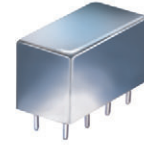


Plug-In, Low Noise Active Mixer

UNCL-R1+

Level 7 (LO Power +7 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 has been added in order to identify 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	7
RF	1
IF	8
DC	4
GROUND	3,5,6
CASE GROUND	3,5,6
NOT USED	2

Features

- low noise figure, 4.3 dB typ.
- excellent conversion gain, 5.53 dB typ.
- high L-R isolation, 55 dB typ., L-I isolation, 30 dB typ.
- rugged welded construction
- protected by U.S Patent 6,943,629

Applications

- VHF/UHF
- receivers

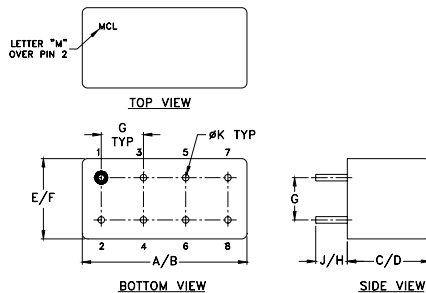
Electrical Specifications

FREQUENCY (MHz)	CONVERSION GAIN (dB)	LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						INPUT POWER (dBm) 1 dB Compr.	DC POWER			
		Mid-Band m		Total Range		L	M	U	L	M	U	Current						
LO/RF f_L-f_U	\bar{X} σ	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.
10-500 DC-500	5.53 0.11	2	5	2	65	45	55	40	47	35	40	30	30	20	25	17	-10	12 35

Up to -10 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



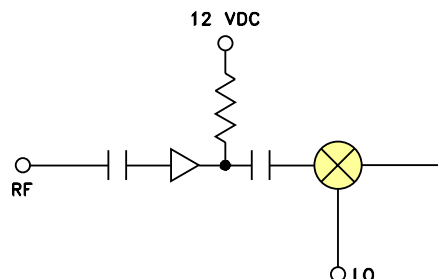
Outline Dimensions (inch/mm)

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 Gain (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
10.00	40.00	5.61	77.62	57.99	1.56	2.78
20.00	50.00	5.49	72.32	52.25	1.44	2.84
50.00	80.00	5.36	66.36	45.67	1.39	2.73
53.24	83.24	5.37	65.76	45.21	1.39	2.69
96.47	66.47	5.30	60.66	40.46	1.39	2.67
100.00	70.00	5.32	60.05	40.13	1.39	2.68
139.71	109.71	5.35	57.13	37.51	1.40	2.63
182.94	152.94	5.31	55.10	35.92	1.41	2.57
200.00	170.00	5.34	54.43	35.12	1.42	2.62
226.18	196.18	5.30	53.30	34.24	1.44	2.69
240.59	210.59	5.28	52.81	33.69	1.45	2.67
250.00	220.00	5.29	52.43	33.48	1.45	2.65
269.41	239.41	5.27	51.67	33.07	1.46	2.60
312.65	282.65	5.22	50.11	31.62	1.51	2.64
355.88	325.88	5.17	48.93	30.30	1.55	2.70
399.12	369.12	5.12	47.95	29.10	1.60	2.68
442.35	412.35	5.02	46.61	27.98	1.66	2.71
471.18	441.18	4.99	46.28	27.35	1.70	2.75
485.59	455.59	4.94	46.20	27.50	1.72	2.77
500.00	470.00	4.93	45.76	26.91	1.73	2.77

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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.

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