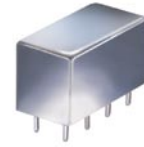


Plug-In, Low Noise Active Mixer

Level 7 (LO Power +7 dBm) 10 to 500 MHz

UNCL-R1+
UNCL-R1



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	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

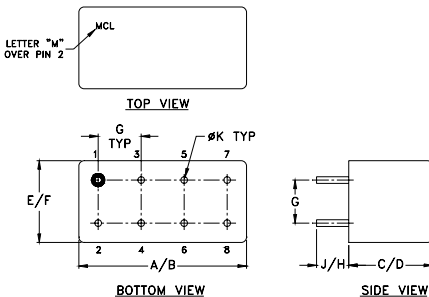
FREQUENCY (MHz)		CONVERSION GAIN (dB)					LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						INPUT POWER (dBm) 1 dB Compr.	DC POWER	
LO/RF	IF	Mid-Band m			Total Range		L		M		U		L		M		U				Current
f_L - f_U		$\bar{X}$	σ	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Typ.	Volt	(mA)	
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 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



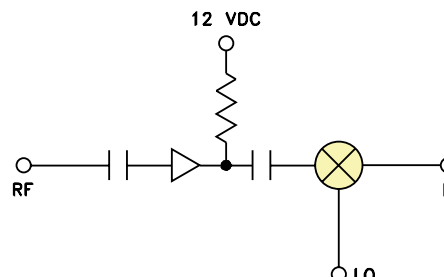
Outline Dimensions (inch)

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 +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



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Performance Charts

UNCL-R1+ UNCL-R1

