

Plug-In, Low Noise

Active Mixer

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

UNCL-R1



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

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

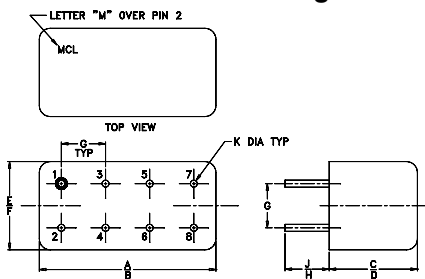
FREQUENCY (MHz)		CONVERSION GAIN (dB)					LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)						INPUT POWER (dBm) 1 dB Compr.	DC POWER	
LO/Rf	IF	Mid-Band m			Total Range		L		M		U		L		M		U				Current
f _L -f _U		$\bar{X}$	σ	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Typ.	Volt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



NOTE: BLUE BEAD INDICATES PIN 1.
PIN NUMBERS DO NOT APPEAR ON UNIT,
FOR REFERENCE ONLY.

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 +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

