

Plug-In, Low Noise Active Mixer

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

UNCL-L1+
UNCL-L1



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	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

+ 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.

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		$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Volt (mA)	
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.

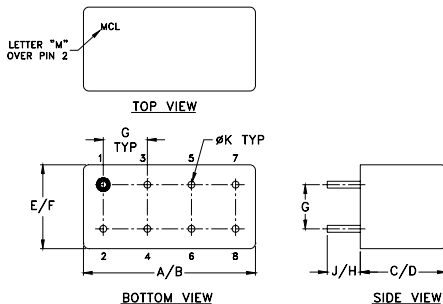
L = low range [f_L to $10 f_L$]

m = mid 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



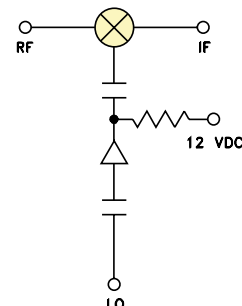
Outline Dimensions (inch)

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 -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



Performance Charts

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