

Plug-In, Low Noise

Active Mixer

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

UNCL-L1+



CASE STYLE: A01

PRICE: \$29.20 ea. QTY (1-9)

+RoHS Compliant

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

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

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

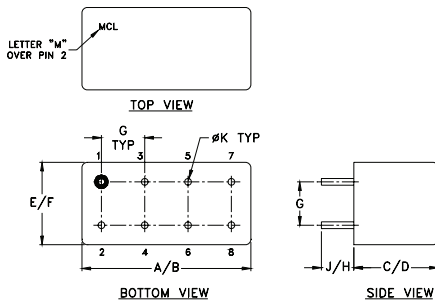
L = low range [f_L to $10 f_L$]

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



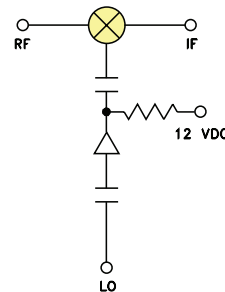
Outline Dimensions (inch)

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)
		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



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs
& shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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