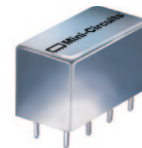


Plug-In Frequency Mixer

Level 7 (LO Power +7 dBm) 0.1 to 500 MHz

SRA-1-1+



CASE STYLE: A01
PRICE: \$19.20 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

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

LO	8
RF	1
IF	3,4^
GROUND	2,5,6,7
CASE GROUND	2

^ pins must be connected together externally

Features

- excellent conversion loss, 4.81 dB typ.
- high L-R isolation, 45 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction
- hermetic

Applications

- VHF/UHF
- defense & federal communications
- instrumentation

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.		L		M		U		L		M		U	
		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.1-500	DC-500	4.81	.11	7.5	8.5	50	45	45	30	35	25	45	30	40	25	30	20

1 dB COMP.: +1 dBm typ.

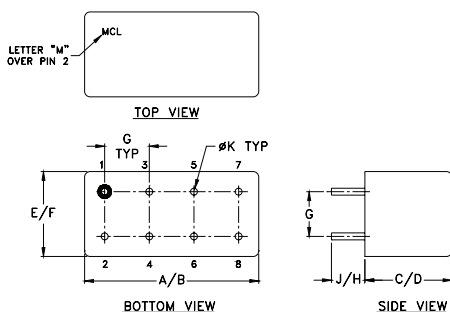
L = low range [f_L to 10 f_L]

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



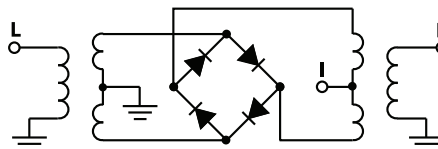
Outline Dimensions (inch/mm)

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
0.10	30.10	5.97	>67.00	>67.00	1.27	2.30
0.50	30.50	5.10	>67.00	>67.00	1.27	2.24
1.00	31.00	5.03	>67.00	60.45	1.27	2.26
2.00	32.00	4.95	>67.00	60.33	1.25	2.20
5.00	35.00	4.94	>67.00	60.77	1.23	2.16
10.00	40.00	4.92	>67.00	61.39	1.18	2.11
20.00	50.00	5.01	>67.00	61.65	1.15	2.08
50.00	80.00	4.95	>67.00	61.63	1.12	2.09
69.83	99.83	4.92	57.89	55.93	1.09	2.12
100.00	70.00	4.82	51.38	49.30	1.10	2.18
173.07	143.07	4.99	42.54	40.81	1.11	2.22
200.00	170.00	5.08	43.50	41.01	1.15	2.23
224.69	194.69	5.23	41.57	39.41	1.22	2.38
259.11	229.11	5.21	38.74	36.85	1.27	2.43
293.52	263.52	5.32	37.88	36.40	1.31	2.44
345.14	315.14	5.71	36.54	33.55	1.34	2.56
396.76	366.76	5.68	37.59	34.68	1.36	2.75
431.18	401.18	5.98	37.76	36.68	1.35	2.85
465.59	435.59	7.01	37.18	36.08	1.31	2.95
500.00	470.00	7.80	38.33	34.17	1.23	3.00

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs
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IF/RF MICROWAVE COMPONENTS

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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp.

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Page 1 of 2

