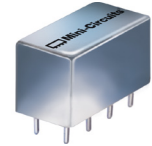


# Plug-In Frequency Mixer

## SRA-1MH+

Level 13 (LO Power +13 dBm) 0.5 to 500 MHz



CASE STYLE: A01

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

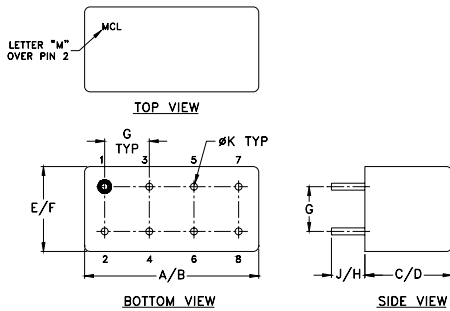
Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

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

^ pins must be connected together externally

### 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

### Features

- excellent conversion loss, 5.65 dB typ.
- high L-R isolation, 45 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction
- hermetic

### Applications

- VHF
- defense & federal communications
- FM broadcast radio

### +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.	Total Range Max.	L		M		U		L		M		U	
		$\bar{X}$	$\sigma$			Max.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.5-500	DC-500	5.65	.04	7.0	8.5	50	45	45	30	35	25	45	35	40	25	30	20

1 dB COMP.: +9 dBm typ.

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

m = mid band [ $2 f_L$  to  $f_U/2$ ]

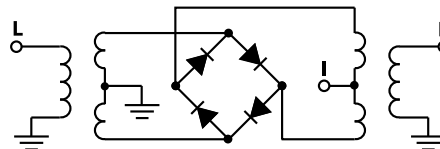
M = mid range [ $10 f_L$  to  $f_U/2$ ]

U = upper range [ $f_U/2$  to  $f_U$ ]

### 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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
1.00	31.00	7.26	66.63	59.30	1.29	1.95
2.00	32.00	6.48	65.04	58.69	1.13	1.91
5.00	35.00	5.80	64.44	58.27	1.07	1.85
10.00	40.00	5.74	61.13	53.40	1.07	1.98
20.00	50.00	5.69	58.51	50.54	1.07	1.94
50.00	80.00	5.58	56.72	48.94	1.08	1.82
78.97	48.97	5.62	55.44	47.33	1.08	1.80
100.00	70.00	5.44	53.92	46.33	1.09	1.79
125.75	95.75	5.44	53.09	46.06	1.09	1.83
141.35	111.35	5.41	52.16	45.59	1.10	1.85
172.53	142.53	5.46	48.96	44.44	1.11	1.88
200.00	170.00	5.64	47.22	43.17	1.11	1.87
250.50	220.50	5.55	44.34	41.70	1.15	1.96
297.29	267.29	5.63	44.71	40.68	1.18	2.04
344.07	314.07	5.80	41.06	38.65	1.23	2.06
390.85	360.85	5.89	41.01	37.04	1.32	2.08
422.04	392.04	6.29	39.17	36.14	1.37	2.11
453.23	423.23	6.32	38.02	34.90	1.42	2.22
484.41	454.41	6.27	37.70	34.14	1.45	2.34
500.00	470.00	6.32	38.19	35.22	1.49	2.45

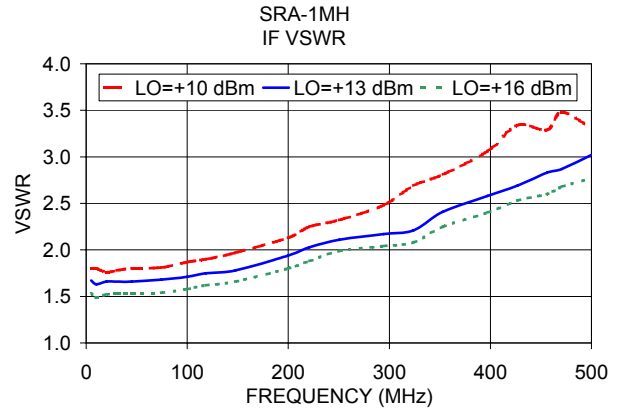
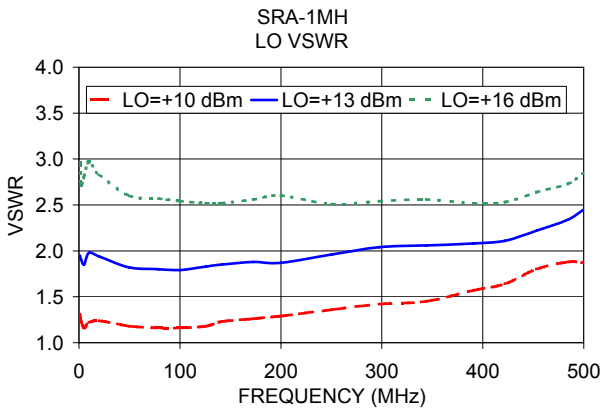
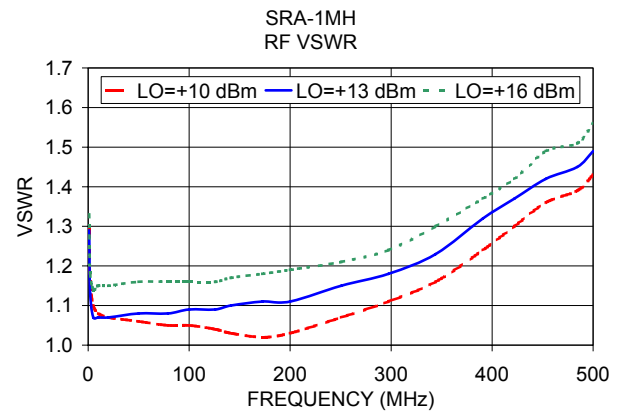
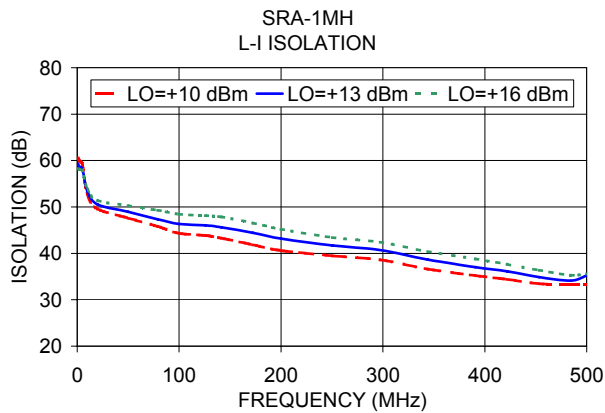
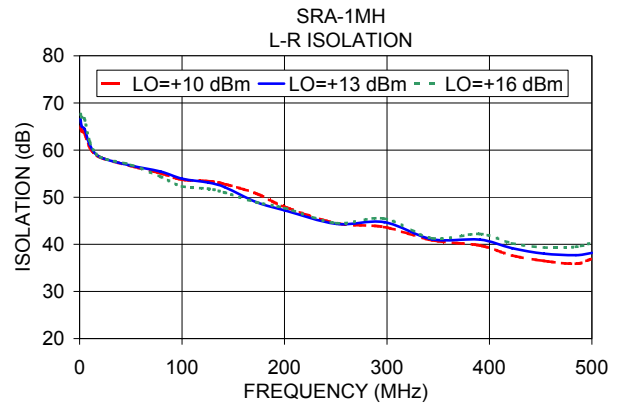
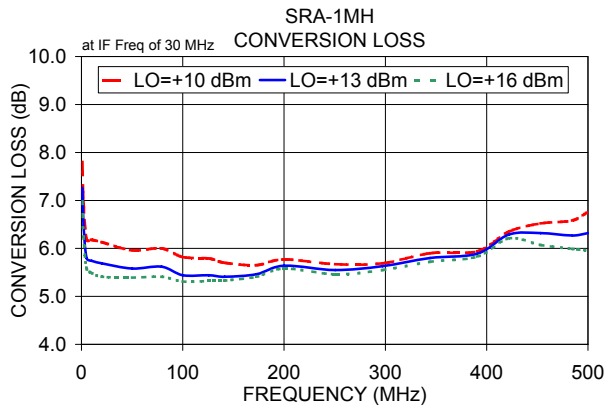
### Electrical Schematic



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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