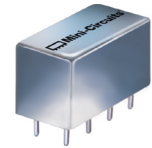


Plug-In Frequency Mixer

SRA-1MH+

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



CASE STYLE: A01

Maximum Ratings

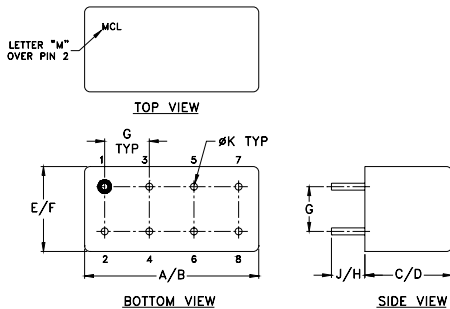
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

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

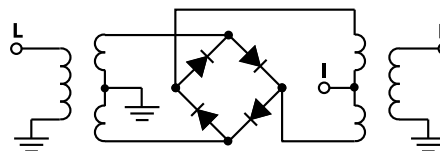
FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total	Max.	L		M		U		L		M		U	
f_L - f_U		\bar{X}	σ	Range		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.5-500	DC-500	5.65	.04	7.0	8.5	50	45	45	30	35	25	45	35	40	25	30	20

1 dB COMP.: +9 dBm typ. L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
m = mid band [$2 f_L$ to $f_U/2$]

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 +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

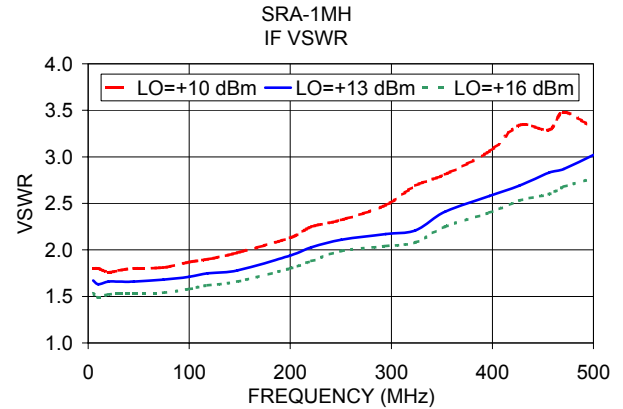
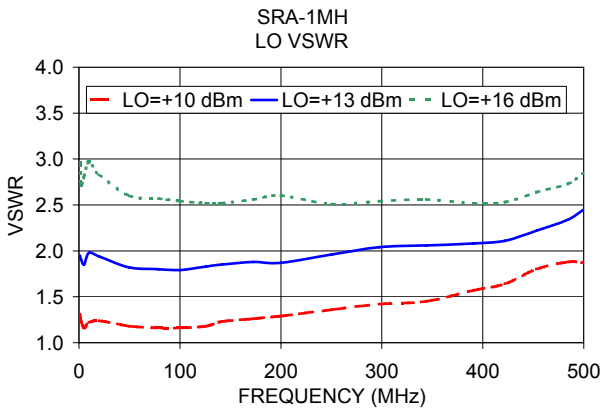
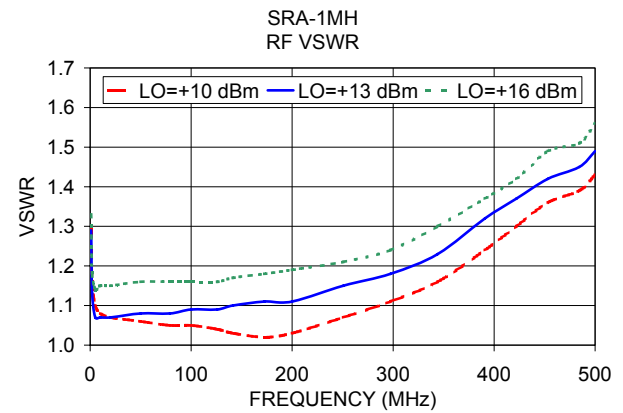
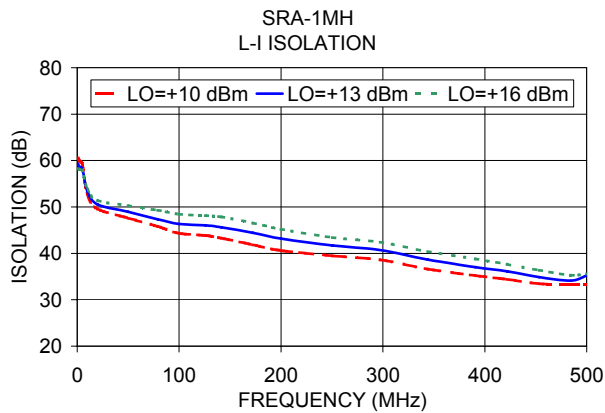
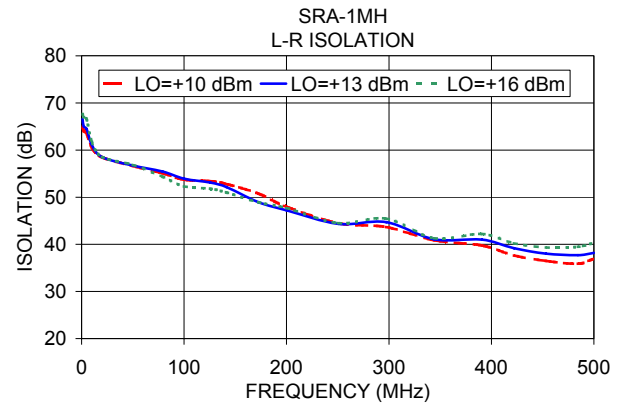
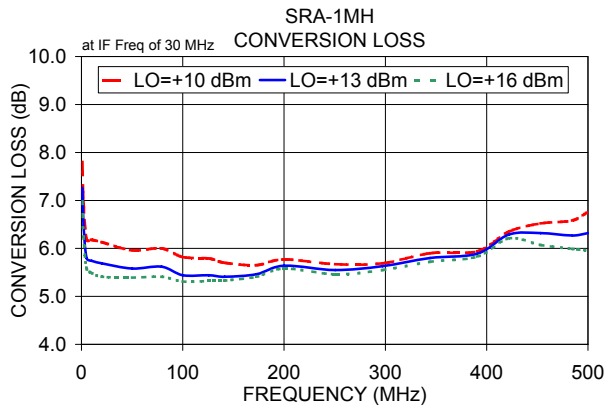
Electrical Schematic



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.
- The parts covered by this specification document are subject to Mini-Circuits 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-Circuits' website at www.minicircuits.com/WCLStore/terms.jsp





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