

Plug-In Frequency Mixer

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

SRA-1MH+



Generic photo used for illustration purposes only

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

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

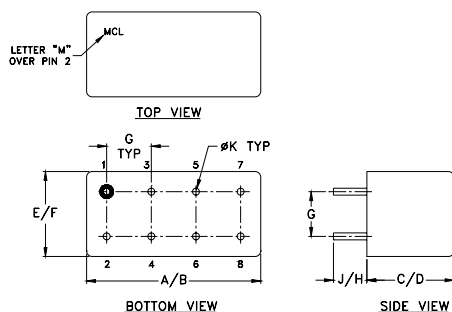
Electrical Specifications

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.		L		M		U		L		M		U	
		$\bar{X}$	σ	Max.	Max.	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 [$2 f_L$ to $f_U/2$]
M = mid range [$10 f_L$ to $f_U/2$]
U = upper range [$f_U/2$ to f_U]

Outline Drawing



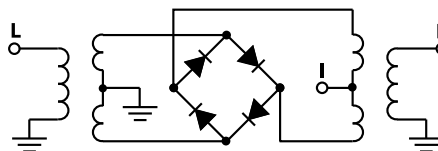
Outline Dimensions (inch/mm)

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 +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



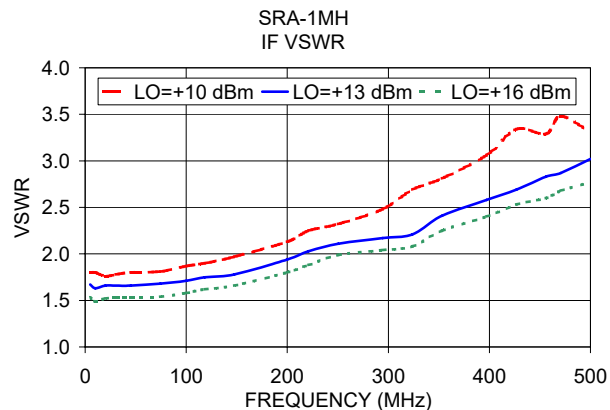
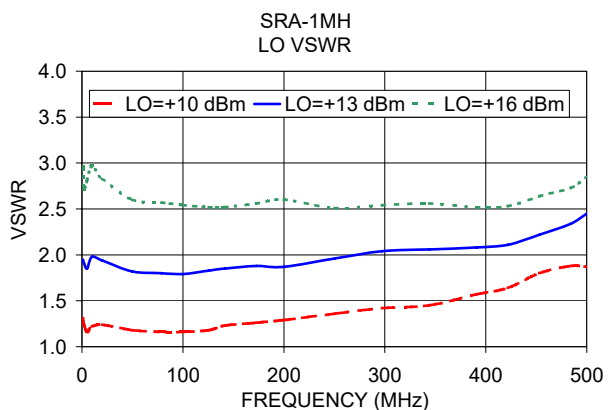
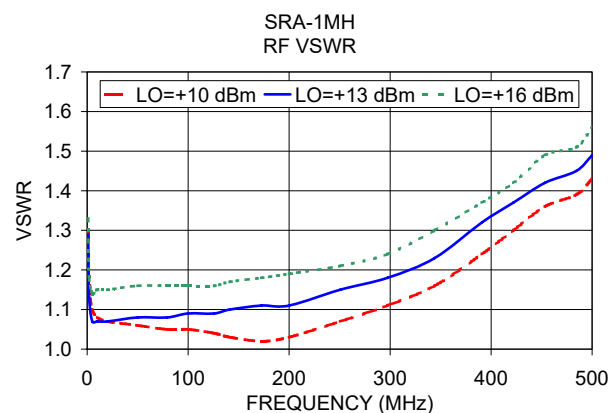
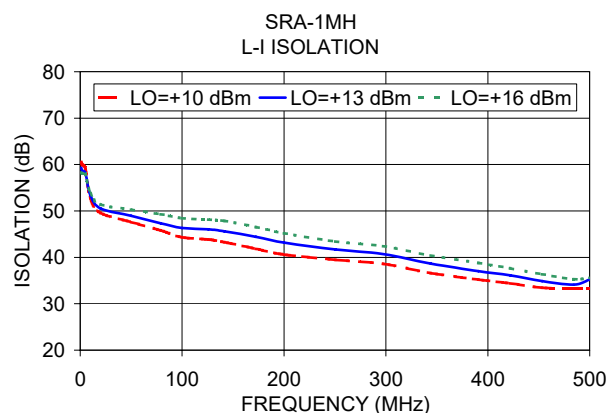
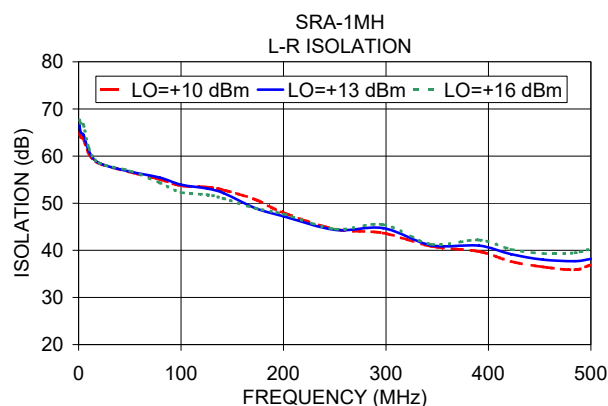
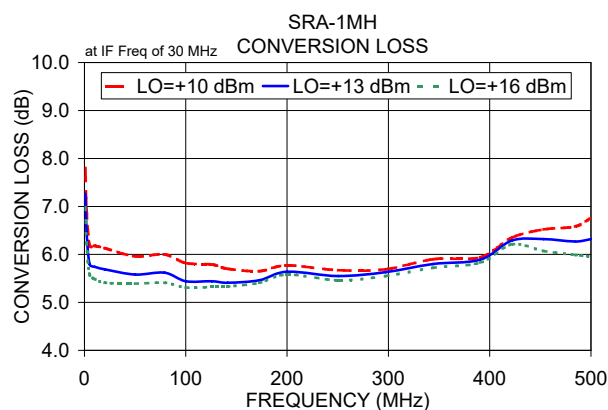
Notes

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