

Plug-In Frequency Mixer

SRA-3H+

Level 17 (LO Power +17 dBm) 0.05 to 200 MHz

Maximum Ratings

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

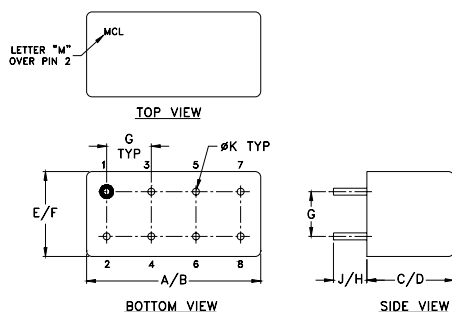
Permanent damage may occur if any of these limits are exceeded.

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, 5.18 dB typ.
- high L-R isolation, 40 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction
- hermetic

Applications

- VHF/UHF
- FM broadcast radio
- maritime communications
- defense & federal communications



Generic photo used for illustration purposes only

CASE STYLE: A01

+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.
0.05-200	DC-200	5.18	.05	7.0	7.5	50	45	40	30	35	25	45	35	40	30	30	20

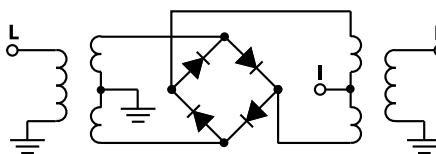
1 dB COMP.: +10 dBm typ.

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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
0.05	30.05	5.79	61.52	58.47	1.22	2.35
0.20	30.20	5.33	61.30	55.83	1.23	2.27
1.00	31.00	5.25	61.00	55.41	1.22	2.14
5.00	35.00	5.18	58.85	54.15	1.21	2.17
10.00	40.00	5.36	54.85	51.92	1.20	2.19
20.00	50.00	5.40	48.89	47.33	1.20	2.19
41.42	71.42	5.37	41.07	40.89	1.19	2.18
50.00	80.00	5.37	39.79	39.78	1.18	2.27
69.00	99.00	5.34	39.34	38.19	1.15	2.20
89.68	59.68	5.33	38.45	35.45	1.15	2.21
103.47	73.37	5.34	36.25	36.39	1.13	2.14
110.37	80.37	5.37	35.73	35.84	1.13	2.07
117.26	87.26	5.38	35.17	35.59	1.11	2.12
131.05	101.05	5.40	34.48	35.04	1.10	2.15
137.95	107.95	5.42	33.95	34.10	1.10	2.24
151.74	121.74	5.50	32.91	31.97	1.11	2.21
165.53	135.53	5.66	31.97	30.09	1.12	2.17
179.31	149.31	5.76	31.41	28.67	1.14	2.13
193.10	163.10	5.77	31.62	28.17	1.17	2.20
200.00	170.00	5.75	32.02	28.21	1.19	2.23

Electrical Schematic



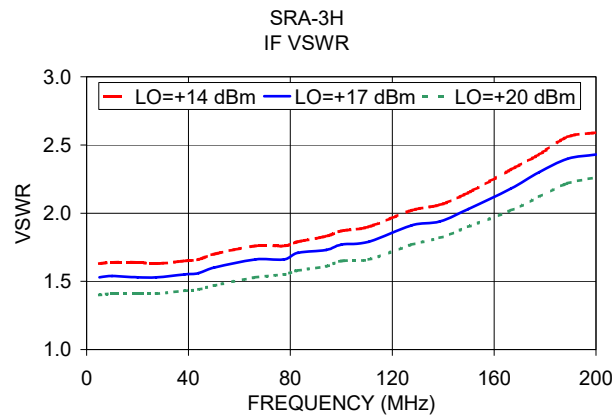
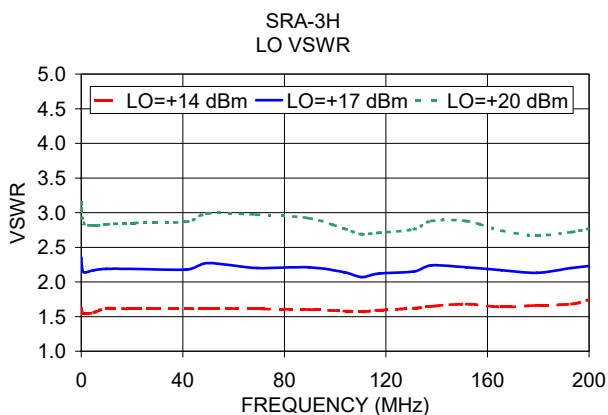
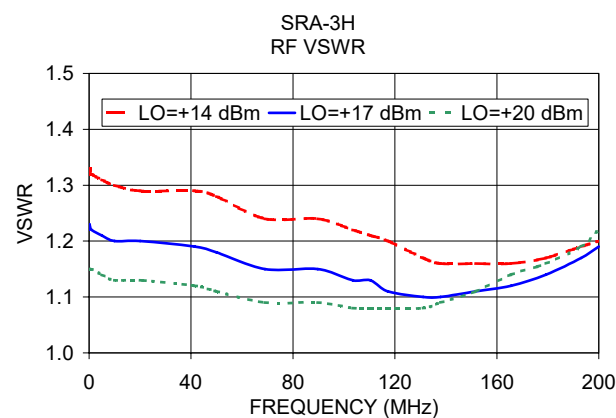
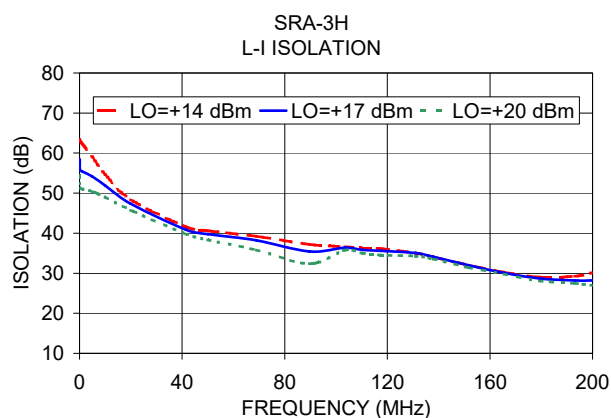
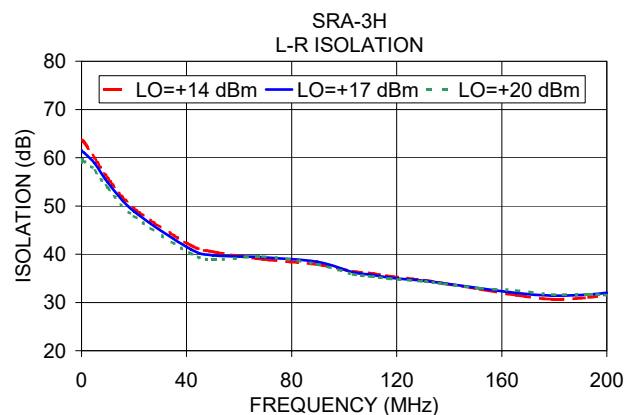
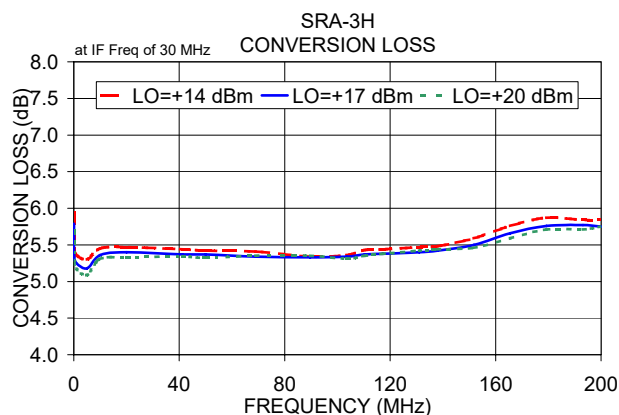
Notes

- A. 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.
- B. 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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