

# Plug-In Frequency Mixer

## SRA-11H+

Level 17 (LO Power +17 dBm) 10 to 3000 MHz



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

### 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
GROUND	2,5,6,7
CASE GROUND	2,5,6,7
NOT USED	4

### Features

- excellent conversion loss, 6.83 dB typ.
- good L-R isolation, 25 dB typ. L-I isolation, 25 dB typ.
- rugged welded construction
- hermetically sealed

### Applications

- VHF
- MMDS
- PCS
- GPS
- defense & civil space systems

### 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	
		$\bar{X}$	$\sigma$			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
10-3000	10-1000	6.83	.09	10.0	12.0	27	20	25	18	23	16	27	20	25	18	23	16

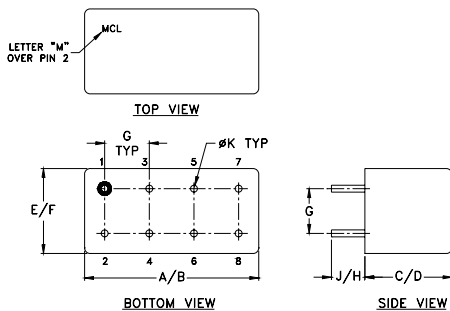
1 dB COMP.: +10 dBm typ.

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  $f_U$ ]

### Outline Drawing



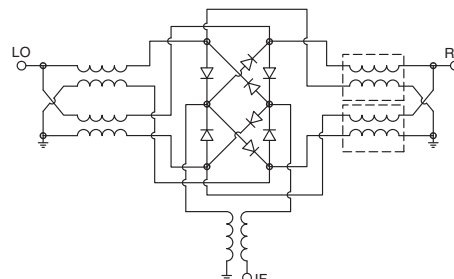
### Outline Dimensions (inch/mm)

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 +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
10.00	40.00	6.43	32.26	35.01	1.13	2.07
20.00	50.00	6.58	33.52	36.23	1.07	2.19
103.44	73.44	6.60	32.25	33.97	1.08	2.01
200.00	170.00	6.78	30.89	32.03	1.13	1.96
290.31	260.31	6.75	29.76	30.61	1.18	1.91
500.00	470.00	6.94	28.74	29.28	1.29	1.83
570.63	540.69	6.81	28.80	29.04	1.34	1.81
757.50	727.50	7.00	28.06	28.08	1.48	1.81
944.38	913.91	7.05	28.00	26.87	1.66	1.80
1037.80	1007.40	7.37	28.67	26.49	1.72	1.74
1318.10	1288.00	6.81	27.69	26.66	1.92	1.69
1505.00	1474.90	6.68	27.57	27.97	1.99	1.65
1598.40	1568.30	6.65	27.30	28.78	1.75	1.91
1785.30	1755.00	6.71	27.75	28.96	1.89	1.91
1972.20	1942.10	6.57	29.51	31.44	1.76	1.75
2065.60	2035.10	6.76	28.94	33.79	1.68	1.66
2252.50	2222.10	6.61	30.22	36.80	1.68	1.49
2439.40	2408.60	6.63	31.19	37.00	1.69	1.14
2626.30	2596.00	6.95	30.21	30.13	1.49	1.26
3000.00	2969.30	8.58	32.46	26.88	1.90	2.47

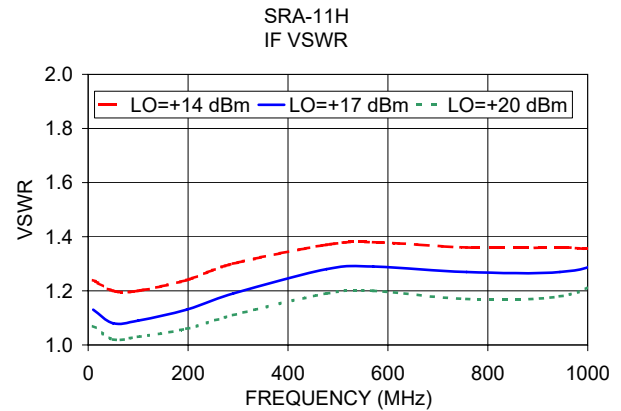
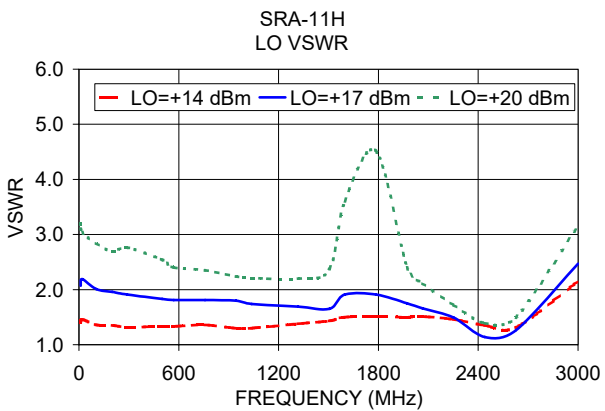
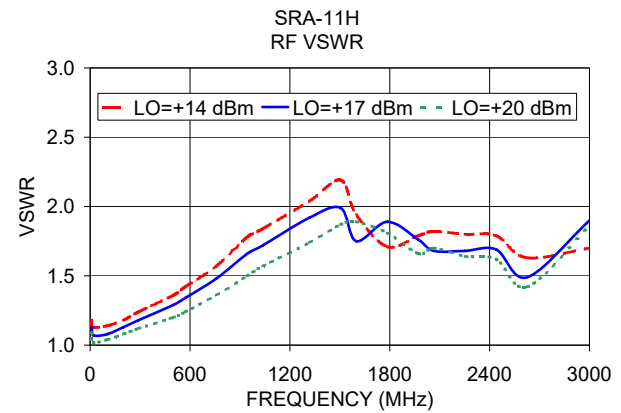
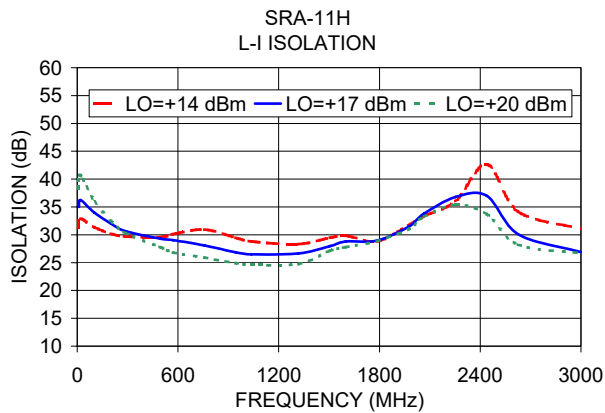
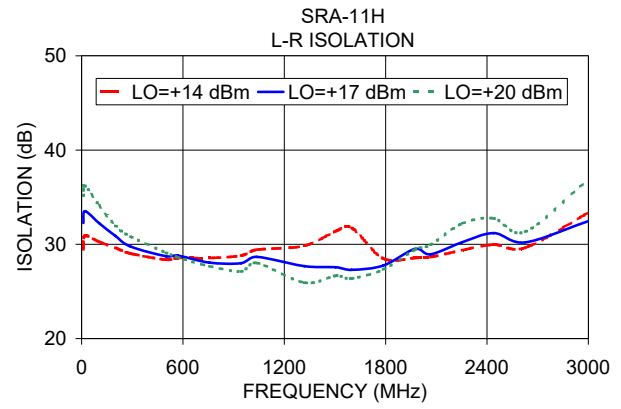
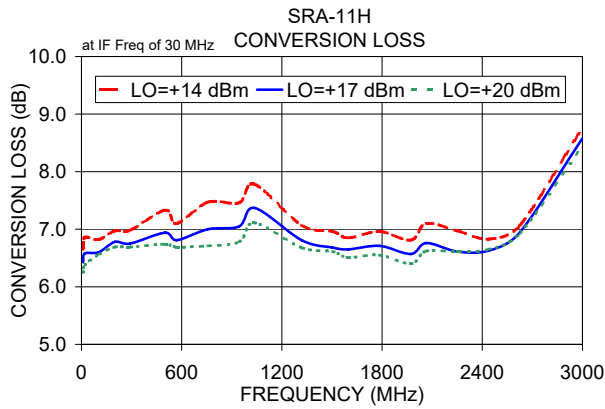
### Electrical Schematic



### 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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