

Plug-In Frequency Mixer

SRA-3+

Level 7 (LO Power +7 dBm) 0.025 to 200 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

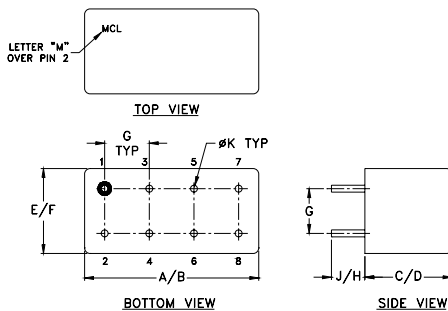
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

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, 4.61 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

Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)									
		L	M	U	L	M	U							
LO/RF f_L-f_U	Mid-Band m \bar{X} σ Max.	Total Range Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
.025-200	DC-200	4.61 .06 7.5 8.5	60	50	45	35	35	25	45	35	40	30	30	20

1 dB COMP.: +1 dBm typ.

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

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

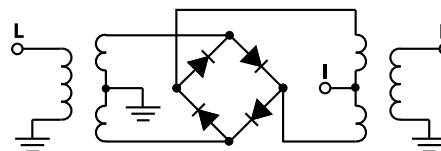
M = mid range [$10 f_L$ to $f_U/2$]

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)	
						LO +7dBm
RF	LO	LO	LO	LO	LO	
0.025	30.03	6.94	58.72	53.27	1.16	2.06
0.04	30.04	5.80	55.35	51.43	1.17	2.04
0.05	30.05	5.52	54.61	51.09	1.17	2.01
0.10	30.10	5.16	53.51	50.41	1.16	1.99
0.20	30.20	4.98	53.27	50.18	1.16	2.05
0.50	30.50	4.92	53.12	50.13	1.15	2.08
1.00	31.00	4.82	53.18	50.48	1.15	2.07
2.00	32.00	4.77	53.13	50.55	1.14	2.07
5.00	35.00	4.76	53.42	50.99	1.13	2.05
10.00	40.00	4.81	53.68	51.27	1.11	2.02
20.00	50.00	4.87	53.67	50.52	1.10	2.02
38.48	68.48	4.96	53.25	48.52	1.09	2.02
50.00	80.00	4.94	53.49	47.54	1.09	2.03
69.25	99.25	4.90	53.53	45.77	1.08	2.03
84.63	54.63	4.86	53.31	44.13	1.09	2.05
100.00	70.00	4.81	53.55	42.70	1.11	2.07
123.09	93.09	4.87	55.31	40.58	1.13	2.11
153.85	123.85	4.96	52.97	38.04	1.15	2.13
176.93	146.93	5.19	49.53	38.76	1.18	2.14
200.00	170.00	5.28	45.61	38.31	1.21	2.15

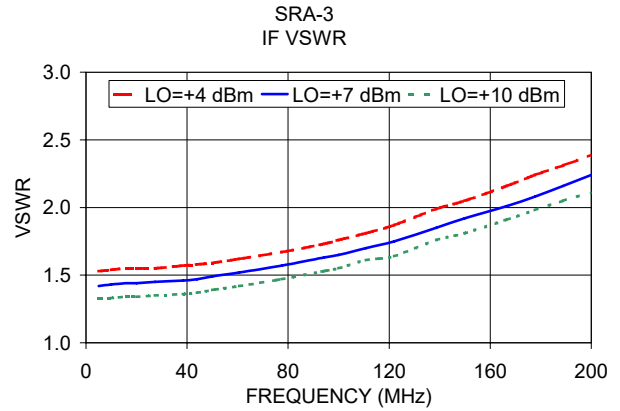
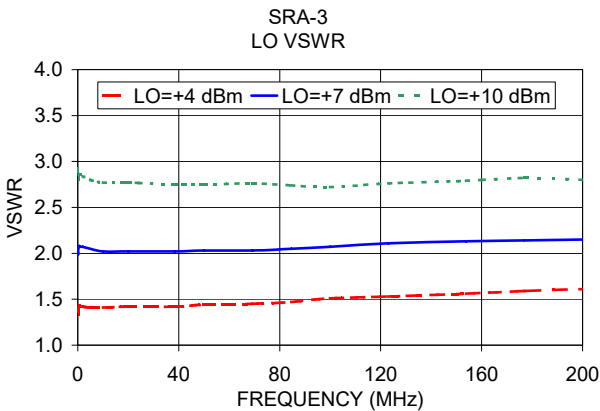
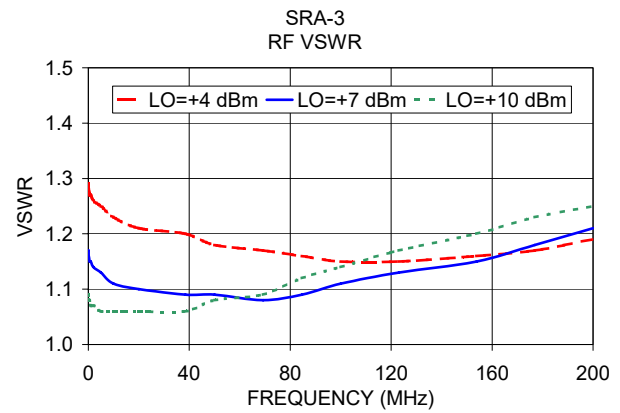
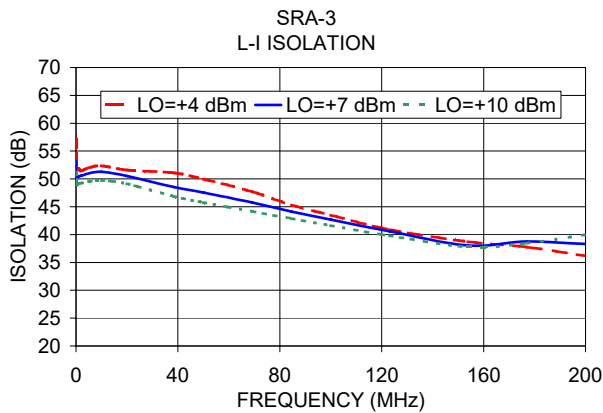
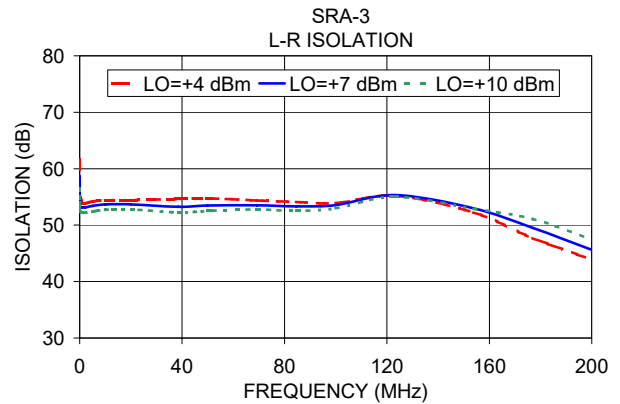
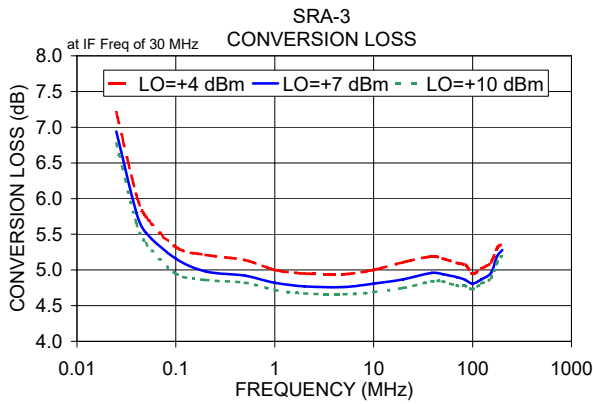
Electrical Schematic



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.
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