Plug-In

Frequency Mixer

SRA-6+

Level 7 (LO Power +7 dBm) 0.003 to 100 MHz

CASE STYLE: A01

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

^ pins must be connected together externally

Features

- excellent conversion loss, 4.58 dB typ.
- high L-R isolation, 45 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction
- hermetic

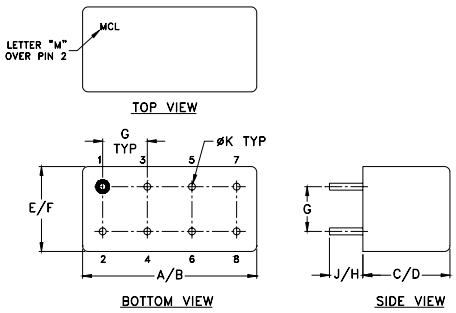
Applications

- VHF TV
- defense & federal communications
- radio astronomy

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
		Mid-Band m			Total Range	L		M		U		L		M		U	
LO/RF f_L-f_U	IF	$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
.003-100	DC-100	4.58	.05	7.5	8.5	60	50	45	30	35	25	60	45	40	25	30	20

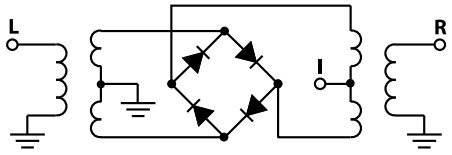
1 dB COMP.: +1 dBm typ.

L = low range [f_L to 10 f_L] m= mid band [$2f_L$ 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)	VSWR RF Port (:1)	Frequency (MHz)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO	LO +7dBm	LO +7dBm	LO +7dBm
0.25	30.25	4.69	1.18	0.25	87.94	69.25	2.72
0.50	30.50	4.70	1.21	2.20	88.51	67.15	2.60
1.00	31.00	4.72	1.23	5.13	80.05	62.74	2.56
2.00	32.00	4.71	1.23	10.00	74.49	58.28	2.48
4.00	34.00	4.72	1.25	30.00	65.04	46.76	2.43
6.00	36.00	4.75	1.26	35.00	61.86	45.54	2.42
8.00	38.00	4.77	1.25	40.00	58.66	43.62	2.43
10.00	40.00	4.77	1.24	45.00	62.82	41.15	2.44
15.00	45.00	4.75	1.24	49.00	62.74	40.69	2.45
19.00	49.00	4.72	1.23	53.00	59.34	40.12	2.47
23.00	53.00	4.69	1.20	57.00	55.11	40.91	2.50
31.00	61.00	5.04	1.19	61.00	51.93	41.11	2.55
39.00	69.00	5.21	1.17	65.00	50.11	39.64	2.58
51.00	81.00	5.29	1.22	69.00	48.56	38.35	2.62
61.00	91.00	5.51	1.37	73.00	47.39	36.57	2.65
67.00	97.00	5.71	1.44	81.00	45.06	33.06	2.70
70.00	100.00	5.80	1.46	85.00	44.27	31.87	2.74
85.00	115.00	5.84	1.41	92.50	43.42	30.32	2.89
92.50	122.50	5.90	1.24	96.25	43.22	30.02	2.98
100.00	130.00	5.93	1.12	100.00	42.87	30.05	3.06

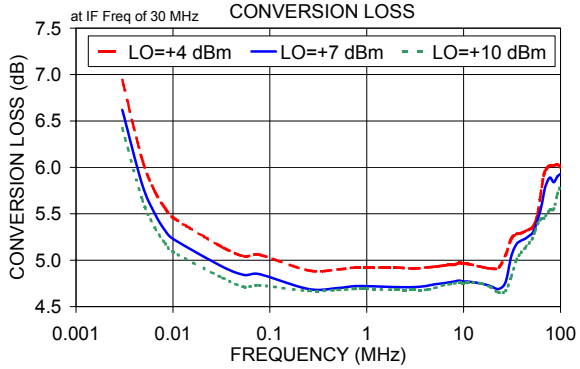
Electrical Schematic



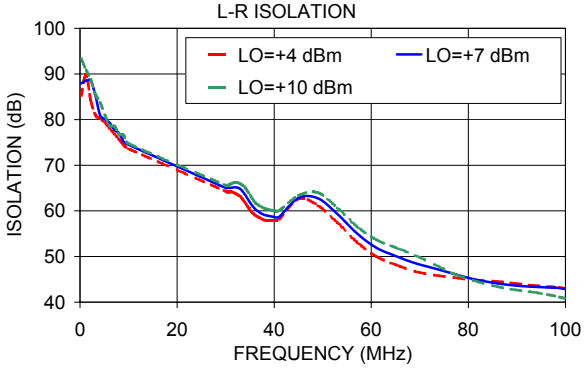
Notes

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.
C. 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/MCLStore/terms.jsp

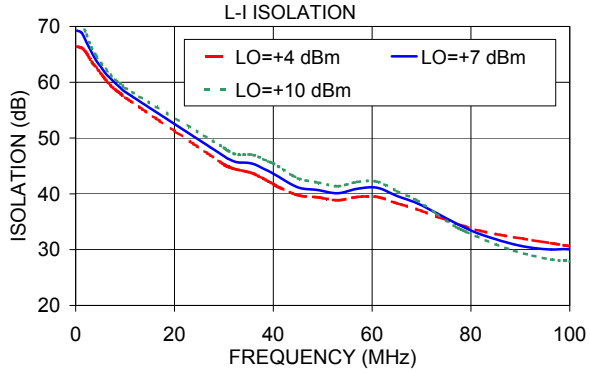
SRA-6+
at IF Freq of 30 MHz
CONVERSION LOSS



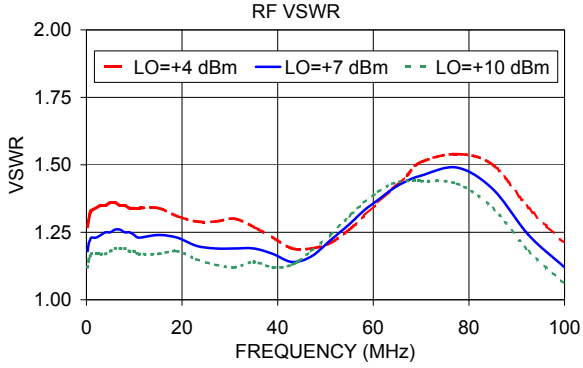
SRA-6+
L-R ISOLATION



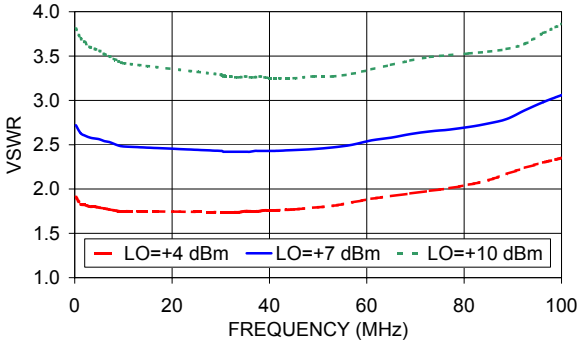
SRA-6+
L-I ISOLATION



SRA-6+
RF VSWR



SRA-6+
LO VSWR



SRA-6+
IF VSWR
at LO Freq of 100 MHz