Plug-In

Frequency Mixer

SRA-173H+

Level 17 (LO Power +17 dBm) 5 to 1200 MHz

CASE STYLE: A01
PRICE: $37.20 ea. QTY (1-9)

+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

	Config.1	Config.2
LO	3	8
RF	1	1
IF	8	3
GROUND	2,5,6,7	2,5,6,7
CASE GROUND	2,5,6,7	2,5,6,7
NOT USED	4	4

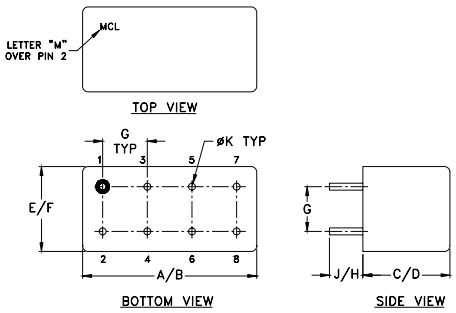
Features

- excellent conversion loss, 5.38 dB typ.
- good L-R isolation, 35 dB typ. L-I isolation, 35 dB typ.
- rugged welded construction
- hermetically sealed

Applications

- cellular
- GSM/ISM
- UHF TV
- defense & federal communications

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.
5-1200	DC-1200*	5.38	.05	7.0	8.5*	40	35	35	25	35	20	40	35	35	20	30	20

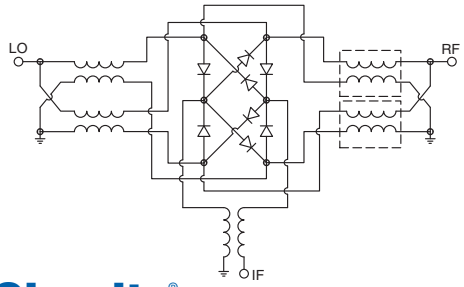
1 dB COMP.: +10 dBm typ.
Below 1 MHz IF, conversion loss increases as frequency decreases to DC: up to 6 dB higher when using Pin Connections Config. 1, to virtually infinite when using Pin Connections config. 2

L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]
m= mid band [2f_L to f_U/2]

Typical Performance Data

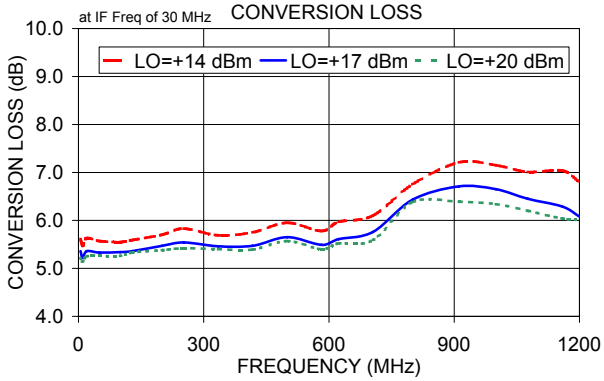
Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
5.00	35.00	5.36	40.90	39.89	1.18	2.53
10.00	40.00	5.22	41.90	43.43	1.18	2.52
20.00	50.00	5.36	42.71	44.48	1.18	2.54
50.00	80.00	5.33	41.81	42.82	1.17	2.44
100.00	70.00	5.34	40.38	40.38	1.18	2.36
128.62	98.62	5.36	39.66	39.17	1.20	2.40
200.00	170.00	5.47	38.20	36.56	1.26	2.16
252.24	222.24	5.54	37.74	35.15	1.34	1.99
334.66	304.66	5.46	37.00	33.06	1.44	1.93
417.07	387.07	5.47	36.23	31.39	1.56	1.75
500.00	470.00	5.65	37.19	30.16	1.66	1.67
581.90	551.90	5.49	37.86	29.87	1.85	1.55
623.11	593.11	5.61	34.99	29.66	2.01	1.40
705.52	675.52	5.76	35.63	29.66	2.24	1.29
800.00	770.00	6.43	36.96	29.67	2.43	1.21
911.55	881.55	6.71	35.83	30.27	2.66	1.17
1000.00	970.00	6.65	33.44	32.10	2.61	1.20
1076.40	1046.40	6.45	35.45	31.19	2.78	1.32
1158.80	1128.80	6.29	35.75	36.16	2.59	1.48
1200.00	1170.00	6.08	34.68	37.45	2.53	1.59

Electrical Schematic

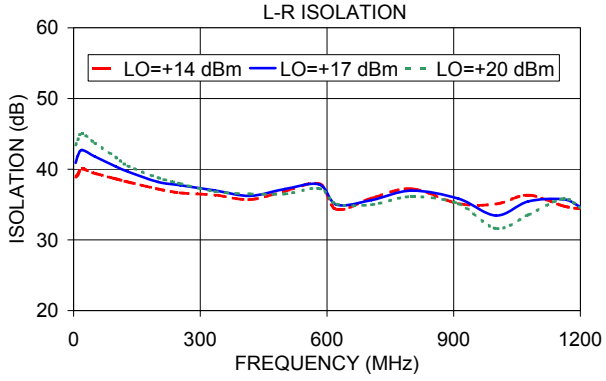


REV. A
M98898
SRA-173H
DJ/TD/CP/AM
130502

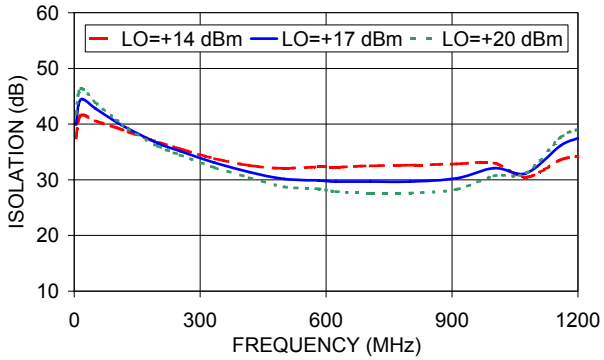
SRA-173H
at IF Freq of 30 MHz CONVERSION LOSS



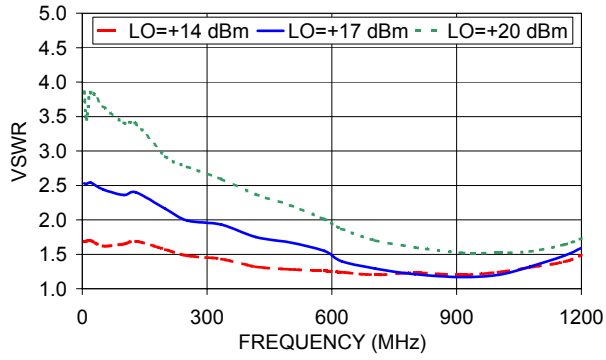
SRA-173H
L-R ISOLATION



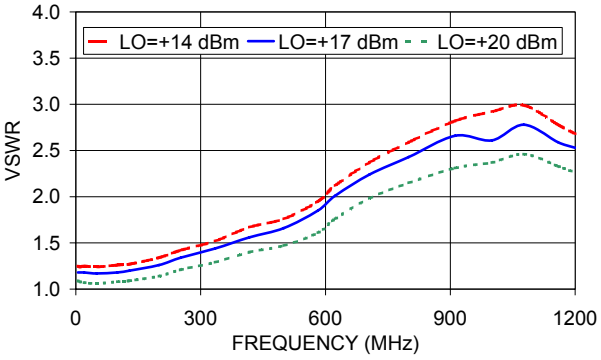
SRA-173H
L-I ISOLATION



SRA-173H
LO VSWR



SRA-173H
RF VSWR



SRA-173H
IF VSWR