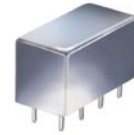


Plug-In Frequency Mixer

SRA-173H

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



CASE STYLE: A01

Maximum Ratings

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

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

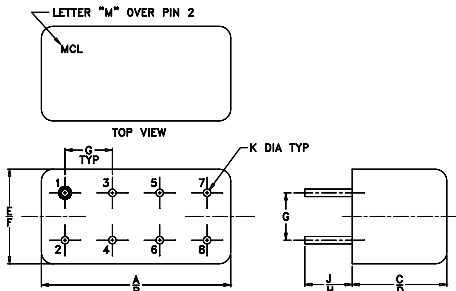
Electrical Specifications

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.	Max.	L		M		U		L		M		U	
		\bar{X}	σ			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 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



NOTE: BLUE BEAD INDICATES PIN 1. PIN NUMBERS DO NOT APPEAR ON UNIT, FOR REFERENCE ONLY.

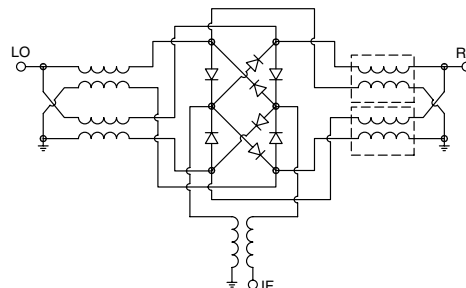
Outline Dimensions (inch/mm)

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
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



Performance Charts

SRA-173H

