

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

Maximum Ratings

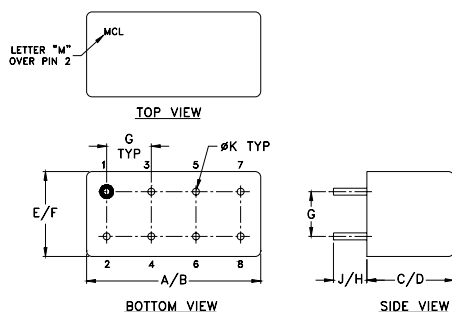
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

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

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		
.200	.20	.14	.031		
5.08	5.08	3.56	0.79		
				wt	grams
					5.2

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



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

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Max.	Total Range	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.

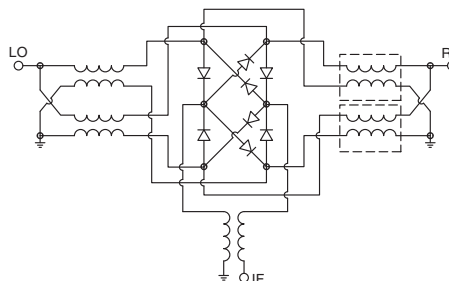
Below 1 MHz IF, conversion loss increases as frequency decreases to DC: up to 6 dB higher when using Pin Connections Config. 1, to virtually infinite when using Pin Connections config. 2

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]

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

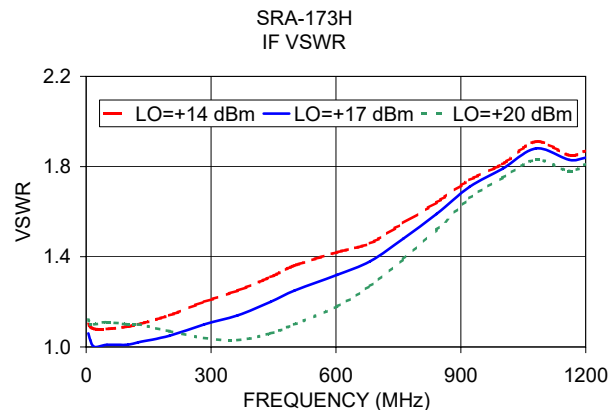
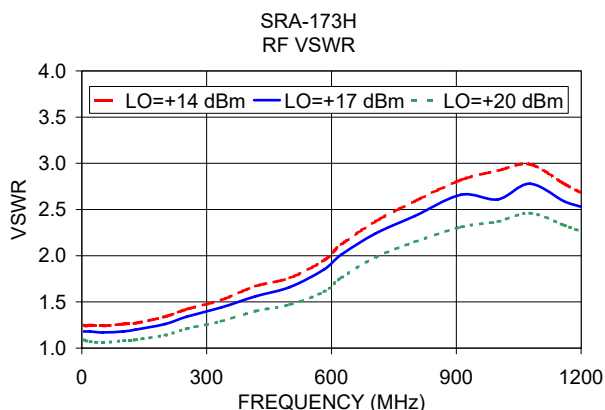
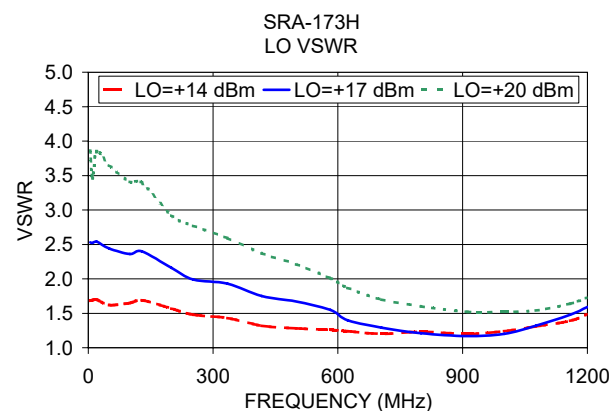
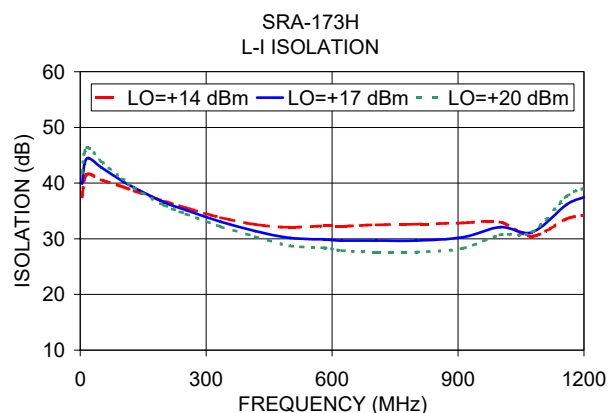
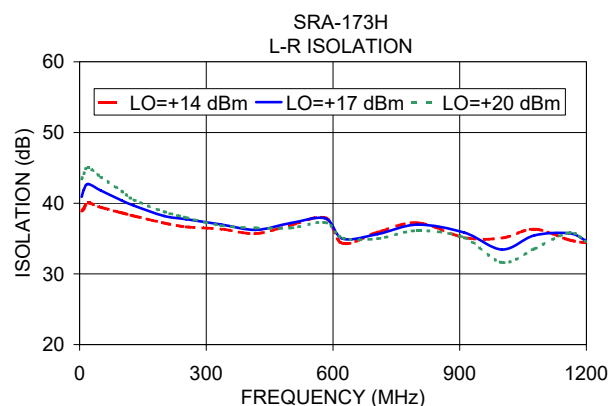
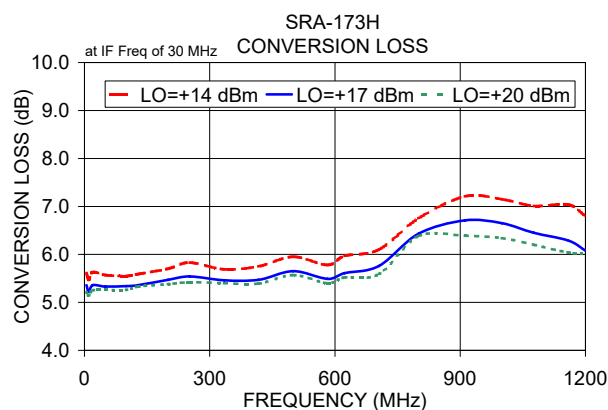
Electrical Schematic



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.
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