

Surface Mount Frequency Mixer

Level 17 (LO Power +17 dBm) 5 to 1500 MHz

JMS-5H+ JMS-5H



CASE STYLE: BH292
PRICE: \$12.95 ea. QTY (1-9)

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

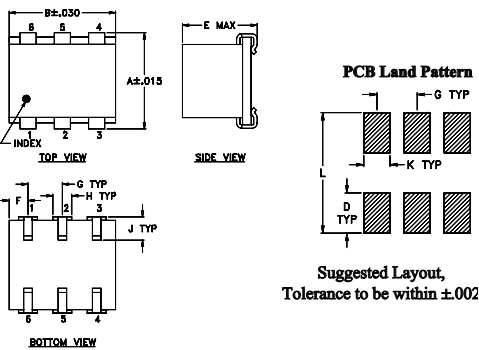
Maximum Ratings

Operating Temperature	-40°C to 85°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

LO	6
RF	3
IF	2
GROUND	1,4,5

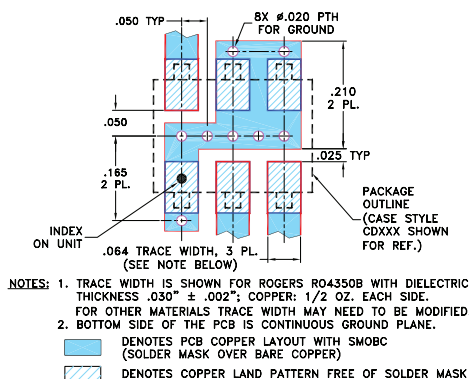
Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J	K	L	wt
.280	.310	--	.100	.225	.055	.100					grams
7.11	7.87	--	2.54	5.72	1.40	2.54					0.45

Demo Board MCL P/N: TB-03 Suggested PCB Layout (PL-052)



Features

- low conversion loss, 5.9 dB typ.
- miniature surface mount
- J-leads for strain relief and excellent solderability

Applications

- up & down converters for receivers & transmitters
- satellite distribution
- cellular/ISM/GSM

Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3 at center band (dBm)
		L	M	U	L	M	U	
5-1500	DC-1000	70	50	20	60	40	8	22

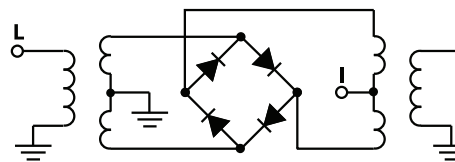
1 dB COMP: +14 dBm typ.
Phase detection, positive polarity

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]

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
10.00	40.00	6.95	70.78	61.92	2.20
20.00	50.00	6.58	65.19	63.52	1.63
50.00	80.00	6.34	58.27	59.11	1.47
100.00	70.00	6.16	57.50	49.97	1.49
149.69	119.69	6.25	57.97	51.05	1.52
200.00	170.00	6.35	58.46	44.60	1.57
289.38	259.38	6.44	45.97	40.19	1.66
429.06	399.06	6.52	35.99	40.36	1.85
500.00	470.00	6.57	33.86	35.13	1.96
568.75	538.75	6.70	31.80	31.81	2.07
708.44	678.44	7.17	28.34	25.09	2.42
750.00	720.00	7.33	27.82	23.34	2.56
848.13	818.13	7.63	27.14	20.18	2.79
987.81	957.81	7.85	25.28	17.43	2.98
1000.00	970.00	7.86	25.09	16.91	3.00
1127.50	1097.50	7.96	23.28	14.89	3.16
1267.19	1237.19	8.09	21.51	13.36	3.15
1406.88	1376.88	8.10	20.40	11.73	2.97
1453.44	1423.44	8.28	20.09	11.57	2.99
1500.00	1470.00	8.50	19.62	11.46	2.94

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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Page 1 of 2

Performance Charts

