

Surface Mount Frequency Mixer

JMS-2+ JMS-2

Level 7 (LO Power +7 dBm) 20 to 1000 MHz



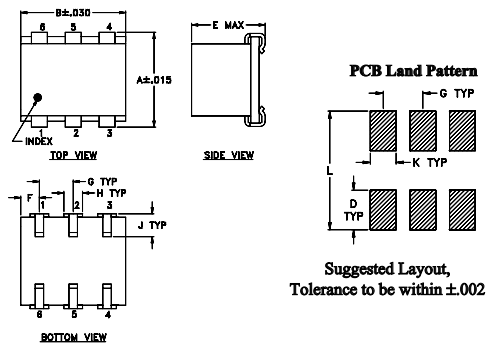
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Pin Connections

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

Outline Drawing

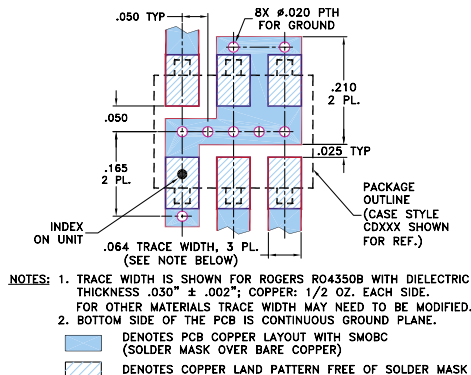


Outline Dimensions (inch)

A	B	C	D	E	F	G
.280	.310	--	.100	.225	.055	.100
7.11	7.87	--	2.54	5.72	1.40	2.54

H	J	K	L	wt
.047	.065	.065	.300	grams
1.19	1.65	1.65	7.62	0.45

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



Features

- excellent L-R isolation, up to 63 dB typ.
- miniature surface mount
- J-leads for strain relief and excellent solderability

Applications

- up & down converters for receivers & transmitters
- VHF/UHF
- cellular/ISM/GSM

CASE STYLE: BH292
PRICE: \$7.45 ea. QTY (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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)			IP3 at center band (dBm)									
	LO/RF	IF	L	M	U	L	M	U										
20-1000	DC-1000	7.0	.15	8.4	9.5	63	40	50	28	35	20	56	30	47	22	37	20	17

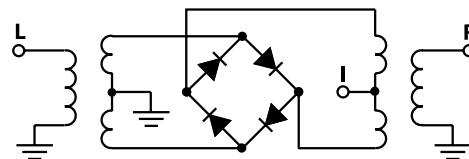
1 dB COMP.: +1 dBm typ.
Phase detection, positive polarity

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)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
5.00	35.00	6.93	67.42	57.23	1.35	2.44
10.00	40.00	7.00	66.49	56.87	1.25	2.37
20.00	50.00	6.97	65.94	56.78	1.22	2.52
35.15	65.15	6.92	62.92	55.59	1.22	2.57
50.00	80.00	6.86	60.51	53.87	1.23	2.54
65.30	95.30	6.89	58.52	52.15	1.23	2.49
100.00	70.00	6.84	55.07	48.85	1.22	2.44
155.76	125.76	6.72	52.10	46.19	1.22	2.43
200.00	170.00	6.70	49.75	44.71	1.23	2.36
246.21	216.21	6.75	48.10	43.71	1.23	2.37
306.52	276.52	6.96	45.81	41.99	1.25	2.40
366.82	336.82	6.97	44.49	39.66	1.27	2.39
427.12	397.12	6.99	42.09	37.81	1.30	2.44
500.00	470.00	7.03	39.89	35.06	1.36	2.58
577.88	547.88	7.29	38.51	32.59	1.44	2.74
668.33	638.33	7.63	36.87	29.46	1.56	2.95
758.79	728.79	7.68	34.71	26.72	1.72	3.17
849.24	819.24	7.98	33.07	23.71	1.95	3.58
909.54	879.54	8.51	32.47	22.35	2.13	3.70
1000.00	970.00	8.90	32.02	20.21	2.45	3.80

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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Performance Charts

