

Surface Mount Frequency Mixer

JMS-2W+ JMS-2W

Level 7 (LO Power +7 dBm) 5 to 1200 MHz



CASE STYLE: BH292

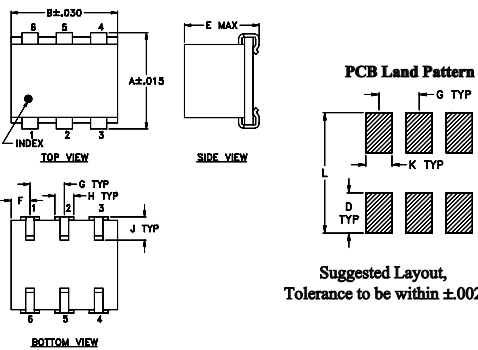
Maximum Ratings

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

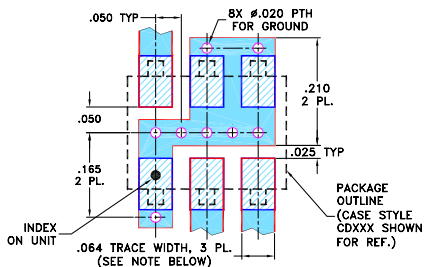
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	wt
.280	.310	--	.100	.225	.055	.100	.047	.065	.065	.300	grams
7.11	7.87	--	2.54	5.72	1.40	2.54	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 and L-I isolation, up to 60 dB typ.
- miniature surface mount
- J-leads for strain relief and excellent solderability

Applications

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

+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)			IP3 at center band (dBm)										
		L	M	U	L	M	U											
LO/RF f_L - f_U	Mid-Band m Total Range Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.										
5-1200	DC-500	6.8	.10	8.0	9.0	60	40	60	30	37	20	60	40	48	20	31	15	17

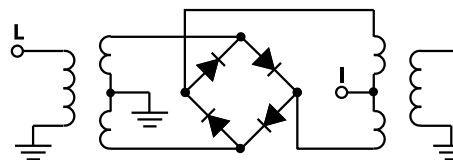
1 dB COMP: +1 dBm typ.
Phase detection, positive polarity

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	6.50	62.55	59.95	1.46	1.69
10.00	40.00	6.43	62.08	59.28	1.44	1.67
15.30	45.30	6.43	62.44	58.34	1.43	1.69
29.94	59.94	6.49	62.14	56.11	1.40	1.68
50.00	80.00	6.45	62.11	53.65	1.39	1.67
81.92	111.92	6.52	62.44	50.79	1.44	1.64
102.45	132.45	6.47	62.71	49.36	1.45	1.63
160.26	130.26	6.44	65.46	46.82	1.44	1.64
200.43	170.43	6.34	65.54	45.89	1.46	1.69
350.63	320.63	6.30	53.86	42.07	1.46	1.79
438.53	408.53	6.29	49.13	40.13	1.45	1.90
548.47	518.47	6.28	44.85	37.77	1.42	2.05
600.00	570.00	6.34	43.57	36.59	1.40	2.15
613.38	583.38	6.32	43.25	36.40	1.38	2.16
685.97	655.97	6.45	41.28	34.97	1.33	2.29
767.15	737.15	6.66	40.04	33.20	1.24	2.44
959.47	929.47	7.03	37.35	31.24	1.04	2.85
1073.01	1043.01	7.10	36.16	30.62	1.32	3.17
1120.00	1090.00	7.17	36.10	30.60	1.47	3.18
1200.00	1170.00	7.25	35.69	30.56	1.62	3.41

Electrical Schematic



Notes

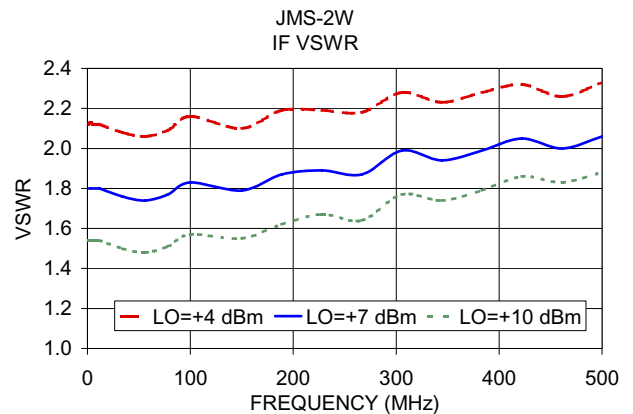
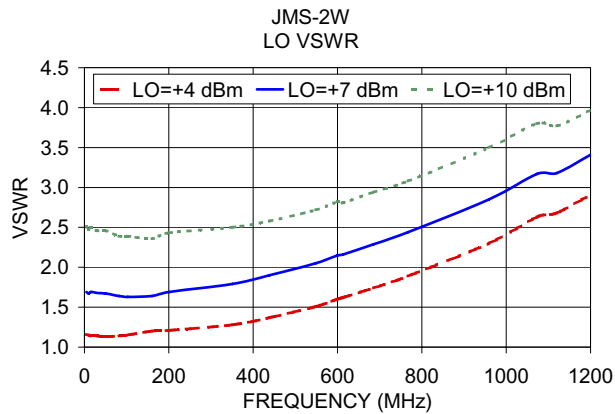
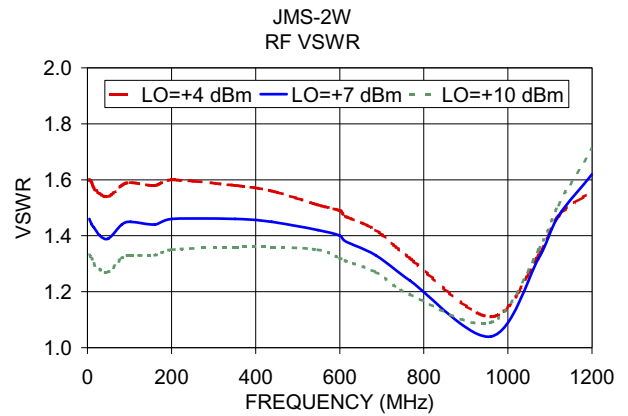
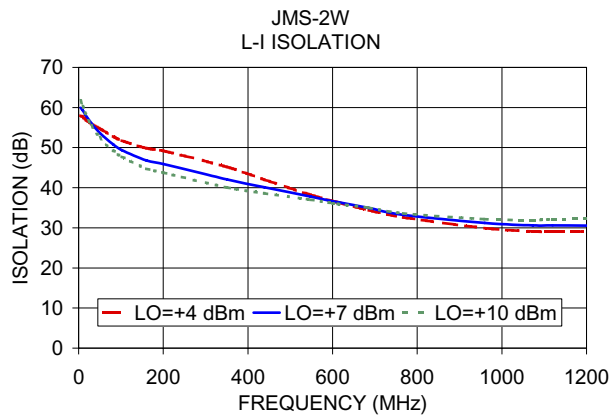
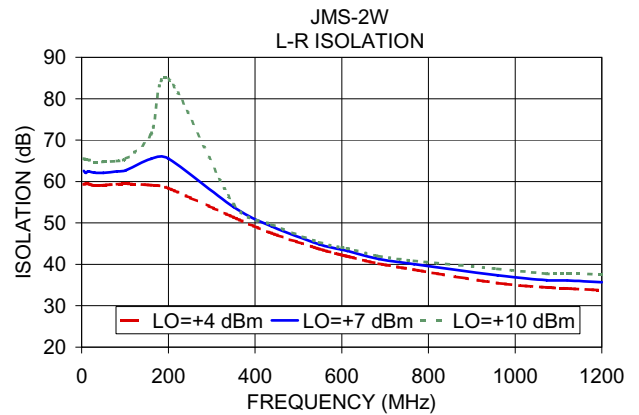
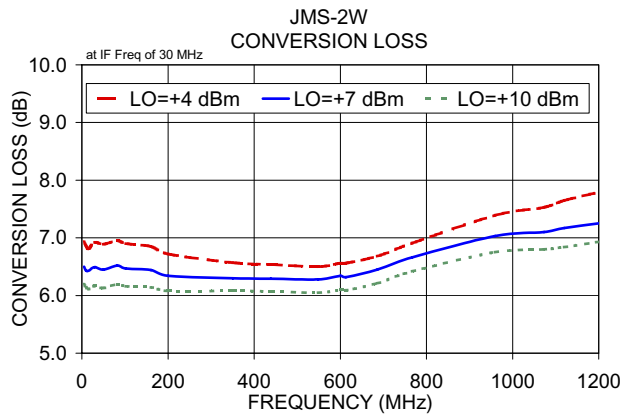
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Performance Charts



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