

# Surface Mount Frequency Mixer

# JMS-2W+ JMS-2W

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



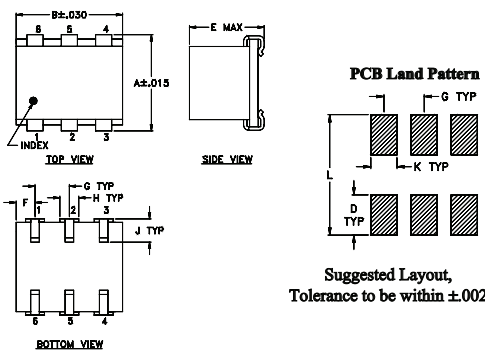
## Maximum Ratings

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



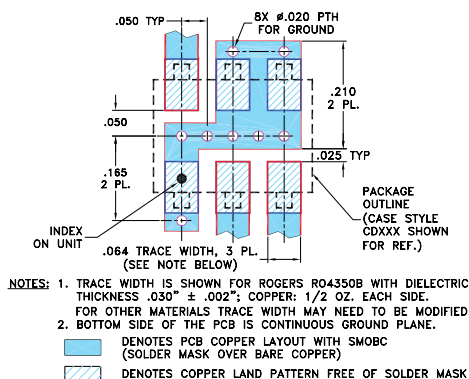
## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.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 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

CASE STYLE: BH292  
PRICE: \$7.95 ea. QTY (1-9)

**+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							
5-1200	DC-500	60	40	60	30	37	20	60	40	48	20	31	15	17

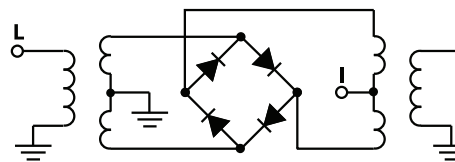
1 dB COMP.: +1 dBm typ.  
Phase detection, positive polarity

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



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

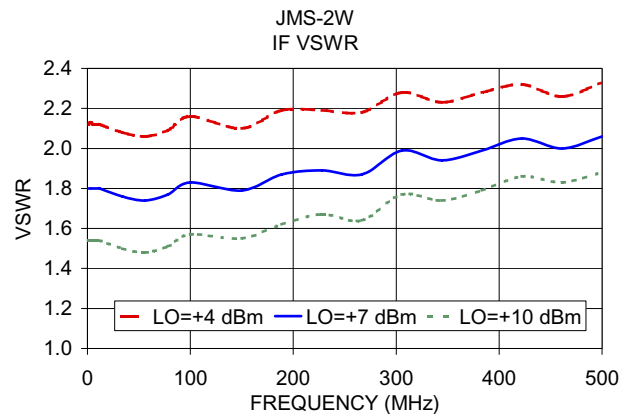
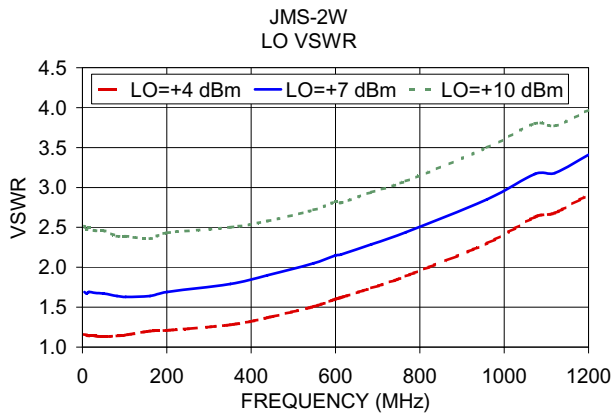
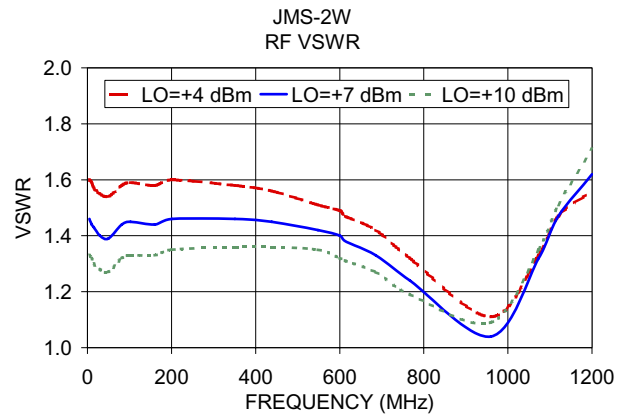
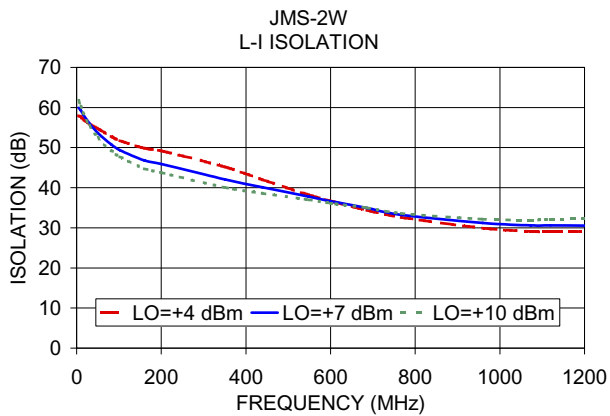
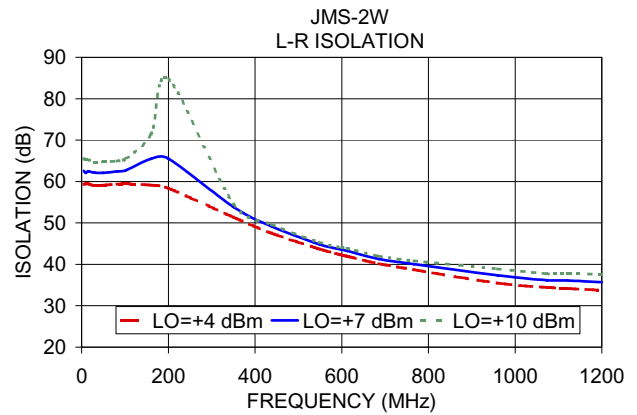
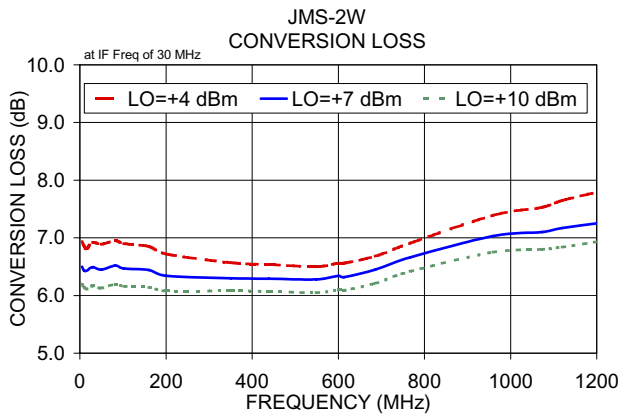
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# Performance Charts

# JMS-2W+ JMS-2W



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IF/RF MICROWAVE COMPONENTS

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