

Surface Mount Frequency Mixer

Level 13 (LO Power +13 dBm) 20 to 1000 MHz

JMS-2MH+
JMS-2MH



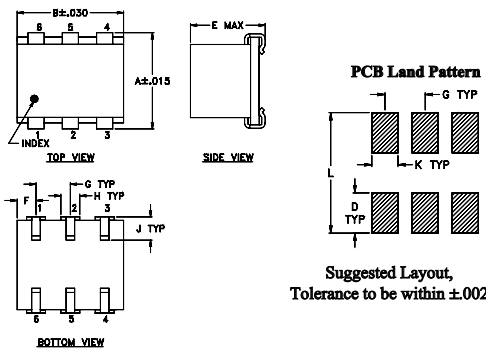
Maximum Ratings

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

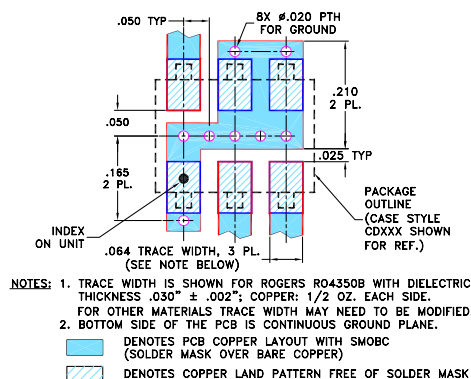
Outline Drawing



Outline Dimensions (inch)

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: \$10.45 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	Mid-Band			Total Range Max.	L		M		U		L		M		U		
		$\bar{X}$	σ	Max.		Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	
		f_L - f_U																
20-1000	DC-1000	7.0	.15	8.4	9.5	63	40	50	28	35	20	56	30	47	22	37	20	22

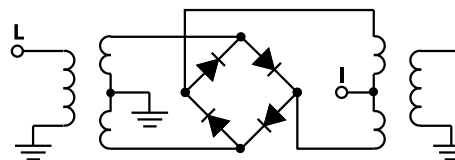
1 dB COMP.: +9 dBm typ.
Phase detection, positive polarity

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
5.00	35.00	6.87	67.46	60.42	1.26	2.23
10.00	40.00	6.71	61.14	54.89	1.16	2.14
20.00	50.00	6.81	55.36	49.28	1.12	2.06
35.15	65.15	6.82	50.90	44.75	1.13	2.13
50.00	80.00	6.86	48.33	42.38	1.13	2.09
65.30	95.30	6.76	46.42	40.39	1.13	2.04
100.00	70.00	6.73	44.03	37.91	1.14	2.02
155.76	125.76	6.54	43.58	37.14	1.15	1.97
200.00	170.00	6.54	42.48	36.16	1.16	1.95
246.21	216.21	6.62	40.92	34.54	1.19	1.98
306.52	276.52	6.76	38.19	31.82	1.23	1.93
366.82	336.82	6.79	34.91	28.84	1.29	2.04
427.12	397.12	6.59	32.18	26.69	1.35	2.09
500.00	470.00	6.52	29.15	24.87	1.44	2.11
577.88	547.88	6.74	26.48	22.60	1.54	2.15
668.33	638.33	7.07	24.41	20.55	1.68	2.21
758.79	728.79	7.37	22.47	18.54	1.82	2.31
849.24	819.24	7.86	20.85	16.52	1.98	2.47
909.55	879.55	8.30	19.83	15.54	2.18	2.56
1000.00	970.00	8.73	19.01	14.41	2.43	2.61

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

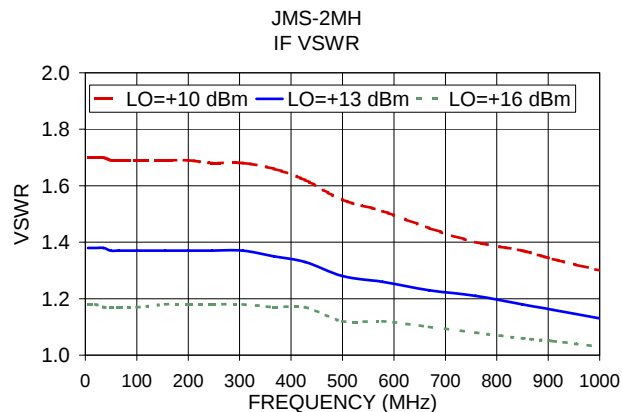
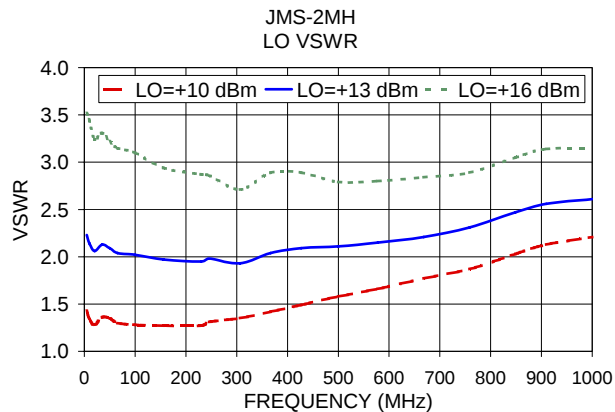
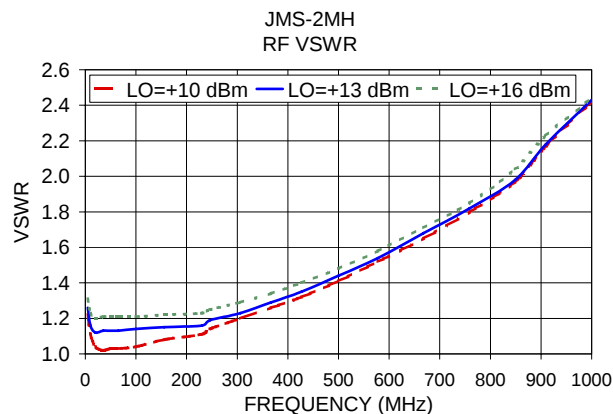
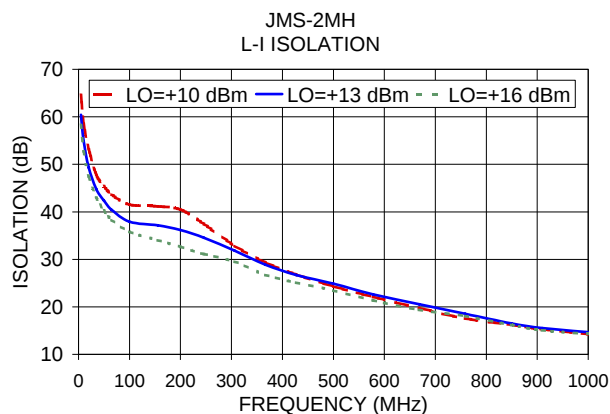
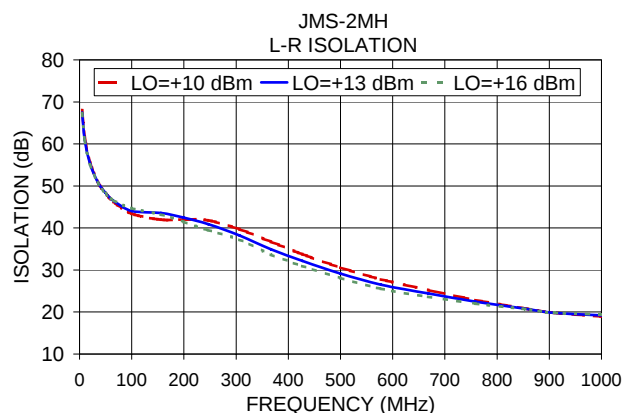
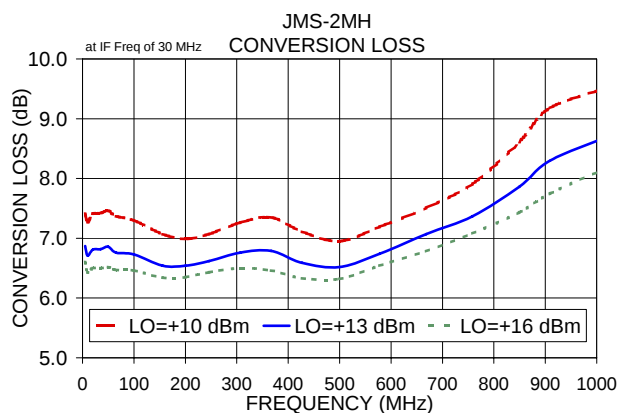
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For detailed performance specs
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Performance Charts

JMS-2MH+ JMS-2MH



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