

Surface Mount

Frequency Mixer

Level 17 (LO Power +17dBm) 20 to 1000 MHz

JMS-2H+
JMS-2H



CASE STYLE: BH292
PRICE: \$12.45 ea. QTY (1-9)

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

See our web site for RoHS Compliance methodologies and qualifications.

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
- UHF
- cellular/ISM/GSM

Mixer Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)				LO-IF ISOLATION (dB)				IP3@ center band Typ. (dBm)	E FACTOR				
	LO/RF $f_L - f_U$	IF	Mid-Band \bar{x}	m	σ	Total Range Max.	L Typ.	M Typ.	U Typ.	L Typ.	M Typ.	U Typ.	L Typ.	M Typ.			U Typ.			
JMS-2H*(+)	20-1000	DC-1000	7.0	.15	8.4	9.5	63	40	50	28	35	20	56	30	47	22	37	20	24	0.7

1 dB COMP.: +14 dBm typ.
* Phase detection, positive polarity
E= (IP3(dBm)-LO Power(dBm))/10

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]
m = mid band [$2f_L$ to $f_U/2$]

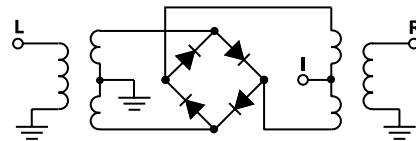
Pin Connections

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

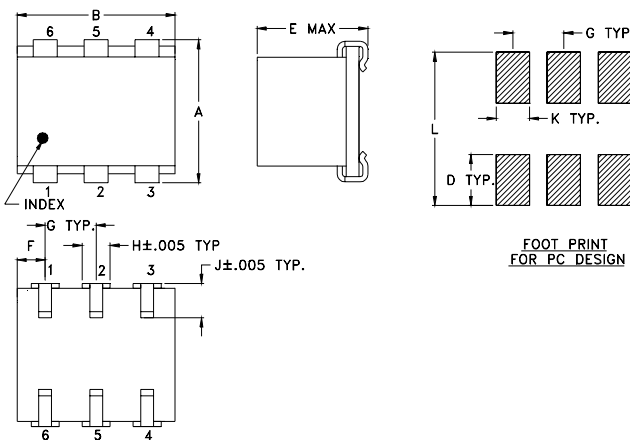
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

electrical schematic



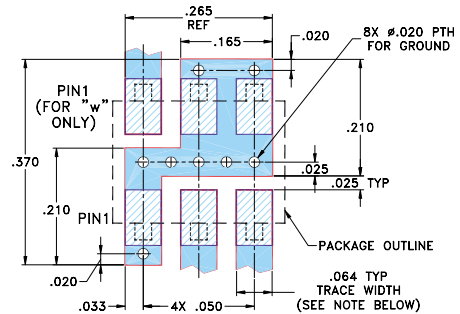
Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J	K	L	wt.
.280	.31	—	.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	.45

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



NOTE: TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



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REV. A
M98898
JMS-2H
ED-3519
DJ/TD/CP
050901
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Typical Performance Data

Frequency		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF port (:1)	VSWR LO port (:1)
RF MHz	LO MHz	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
5.00	35.00	7.85	66.33	72.89	1.54	1.95
10.00	40.00	7.64	63.63	68.70	1.49	1.85
20.00	50.00	7.69	58.93	63.79	1.47	1.79
50.00	80.00	7.55	52.00	56.89	1.45	1.91
95.45	65.45	7.54	46.41	50.84	1.44	1.79
100.00	70.00	7.53	46.04	50.67	1.43	1.79
185.91	155.91	7.51	40.70	46.79	1.43	1.69
200.00	170.00	7.37	40.02	46.99	1.42	1.68
276.36	246.36	7.35	37.35	44.46	1.40	1.56
366.82	336.82	7.22	35.28	42.69	1.34	1.47
457.27	427.27	7.11	33.66	39.45	1.25	1.36
487.42	457.42	7.17	33.17	37.61	1.24	1.34
500.00	470.00	7.07	33.04	37.36	1.21	1.34
547.73	517.73	7.11	32.95	35.68	1.11	1.28
638.18	608.18	7.46	32.78	31.60	1.06	1.29
728.64	698.64	7.45	31.90	30.61	1.27	1.46
819.09	789.09	7.76	30.74	28.78	1.54	1.81
909.55	879.55	8.24	29.67	27.10	1.90	2.21
969.85	939.85	8.54	29.46	25.48	2.06	2.34
1000.00	970.00	8.75	29.31	24.84	2.10	2.40

Performance Charts

