

Surface Mount Frequency Mixer

SKY-60H+ SKY-60H

Level 17 (LO Power +17 dBm) 2500 to 6000 MHz



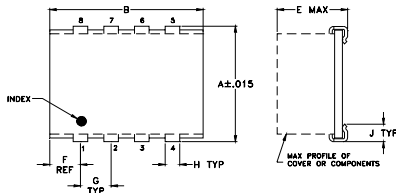
Maximum Ratings

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

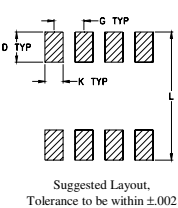
Pin Connections

LO	1
RF	5
IF	7
GROUND	2,3,4,6,8

Outline Drawing



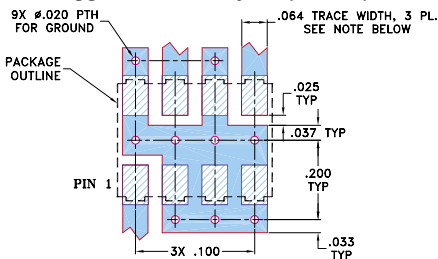
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	wt
.305	.390	--	.100	.105	.045	.100	.047	.065	.065	.325	grams
7.75	9.91	--	2.54	2.67	1.14	2.54	1.19	1.65	1.65	8.26	0.20

Demo Board MCL P/N: TB-11 Suggested PCB Layout (PL-056)



NOTES:

- TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030" ± .002".
COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

Features

- low conversion loss, 6.2 dB typ.
- good L-R isolation, 28 dB typ.
- J-leads for strain relief

Applications

- line of sight links
- fixed satellite

CASE STYLE: BJ398
PRICE: \$17.95 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

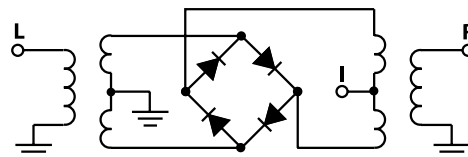
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)	LO-IF ISOLATION (dB)	IP3 at center band (dBm)					
					Mid-Band	Total Range Max.	Typ.	Min.	Typ.
2500-6000	DC-1500	6.20	.20	9.7	28	17	14	8	23

1 dB COMP.: +9 dBm typ.

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
2500.00	2530.00	6.88	32.29	13.59	3.93
2698.11	2728.11	6.44	29.33	13.15	3.72
2896.23	2926.23	6.21	24.54	11.85	3.49
3000.00	3030.00	6.21	23.79	11.50	3.26
3292.45	3322.45	6.19	23.83	11.18	2.33
3490.57	3520.57	6.35	24.27	11.04	1.89
3688.68	3718.68	6.80	24.82	11.25	1.60
3886.79	3916.79	6.23	29.18	11.92	1.49
3952.83	3982.83	6.22	27.07	13.08	1.52
4000.00	4030.00	6.21	26.84	13.50	1.55
4283.02	4253.02	6.47	41.78	15.81	1.95
4547.17	4517.17	6.54	30.70	17.48	2.33
4811.32	4781.32	6.73	29.83	19.11	2.72
4943.40	4913.40	6.75	30.97	20.26	2.69
5000.00	4970.00	6.75	31.42	20.35	2.73
5273.58	5243.58	7.08	28.94	22.12	2.54
5537.74	5507.74	7.79	26.69	23.62	2.26
5801.89	5771.89	8.51	25.77	24.37	2.35
5867.92	5837.92	8.43	25.88	24.64	2.58
6000.00	5970.00	8.38	27.21	24.76	3.17

Electrical Schematic



Mini-Circuits

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Page 1 of 2

Performance Charts

