

Surface Mount Frequency Mixer

SKY-60+ SKY-60

Level 7 (LO Power +7 dBm) 2500 to 6000 MHz



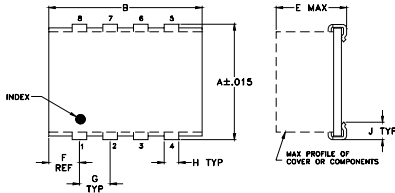
Maximum Ratings

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

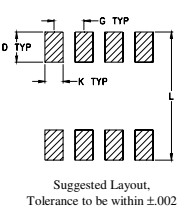
Pin Connections

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

Outline Drawing



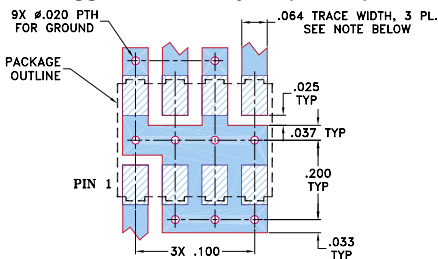
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.305	.390	--	.100	.105	.045	.100
7.75	9.91	--	2.54	2.67	1.14	2.54
H	J	K	L	wt		
.047	.065	.065	.325	grams		
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 RO4350B 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.
 - DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- wide bandwidth, 2500 to 6000 MHz.
- 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: \$14.95 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

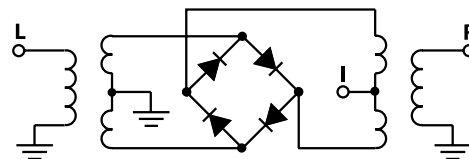
FREQUENCY (MHz)		CONVERSION LOSS (dB)		LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)	
LO/RF	IF	Mid-Band	Total Range	Typ.	Min.	Typ.	Min.	Typ.	
f_L-f_U		\bar{X}	σ	Max.					
2500-6000	DC-1500	6.2	.20	9.7	28	17	14	8	11

1 dB COMP.: +1 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)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
2500.00	2530.00	6.39	28.60	17.65	3.17	4.99
2698.11	2728.11	6.24	26.41	16.56	3.12	4.03
2896.23	2926.23	6.11	23.87	14.61	3.10	3.30
3000.00	3030.00	6.13	22.62	13.96	2.94	3.18
3292.45	3322.45	6.12	21.77	12.75	2.22	2.85
3490.57	3520.57	6.26	22.01	12.06	1.80	2.67
3688.68	3718.68	6.70	22.43	11.80	1.59	2.80
3886.79	3916.79	6.59	26.67	12.03	1.50	2.61
3952.83	3982.83	6.54	27.93	12.54	1.54	2.57
4000.00	4030.00	6.54	27.51	13.08	1.61	2.74
4283.02	4253.02	6.56	33.35	15.58	2.00	3.01
4547.17	4517.17	6.66	35.36	17.59	2.32	3.07
4811.32	4781.32	6.83	31.67	19.88	2.56	2.88
4943.40	4913.40	6.96	30.01	21.24	2.59	2.94
5000.00	4970.00	6.95	30.27	21.94	2.60	2.95
5273.58	5243.58	7.16	28.84	24.64	2.37	3.75
5537.74	5507.74	7.37	27.52	27.13	2.29	4.09
5801.89	5771.89	7.51	26.80	29.17	2.45	5.12
5867.92	5837.92	7.52	26.60	29.78	2.66	5.33
6000.00	5970.00	7.71	26.91	30.39	2.85	5.87

Electrical Schematic



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RF/IF MICROWAVE COMPONENTS

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