

Surface Mount Frequency Mixer

SKY-60LH+ SKY-60LH

Level 10 (LO Power +10 dBm) 2500 to 6000 MHz



Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Pin Connections

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

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: \$16.95 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

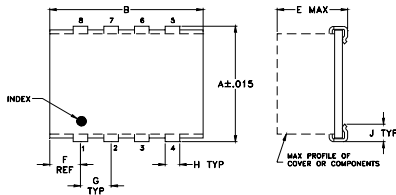
FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		IP3 at center band (dBm)			
		Typ.	Min.	Typ.	Min.				
2500-6000	DC-1500	6.2	.20	9.7	28	17	14	8	15

1 dB COMP.: +5 dBm typ.

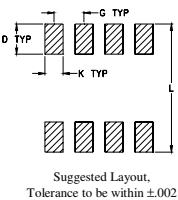
Typical Performance Data

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	6.75	31.14	15.39	3.22	6.15
2698.11	2728.11	6.40	28.43	13.78	2.90	4.50
2896.23	2926.23	6.39	25.62	12.30	2.77	3.69
3000.00	3030.00	5.79	22.84	11.67	5.28	2.80
3292.45	3322.45	6.15	23.74	11.01	2.08	3.00
3490.57	3520.57	6.36	24.42	10.80	1.72	2.81
3576.92	3606.92	6.30	22.84	11.00	3.69	1.56
3846.15	3876.15	6.23	23.33	11.33	3.36	1.42
3952.83	3982.83	6.39	28.51	12.36	1.42	2.56
4000.00	4030.00	6.00	25.17	12.17	3.35	1.69
4283.02	4253.02	6.61	36.12	15.17	1.73	2.72
4500.00	4530.00	5.90	40.00	15.84	3.68	1.85
4653.85	4683.85	5.79	34.00	17.00	3.69	1.90
4923.08	4953.08	5.27	30.11	19.22	2.21	2.32
5000.00	5030.00	5.30	30.68	19.73	2.19	2.29
5192.31	5222.31	6.30	27.83	22.50	2.80	2.17
5461.54	5491.54	6.97	26.34	25.00	3.18	2.41
5537.74	5507.74	7.46	26.73	22.47	2.00	2.61
5801.89	5771.89	8.23	26.31	23.54	2.08	2.98
6000.00	5970.00	8.33	27.22	24.32	2.49	3.30

Outline Drawing



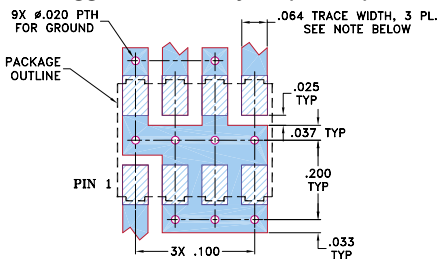
PCB Land Pattern



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		

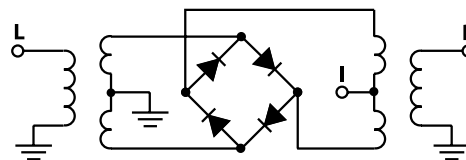
Demo Board MCL P/N: TB-11 Suggested PCB Layout (PL-056)



NOTES:

1. 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.
2. 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

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 CERTIFIED

ALL NEW
minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS

REV. B
M102713
SKY-60LH
DJ/TD/CP/AM
061228
Page 1 of 2

Performance Charts

