

Frequency Mixer

Level 10 (LO Power +10 dBm) 1850 to 1910 MHz

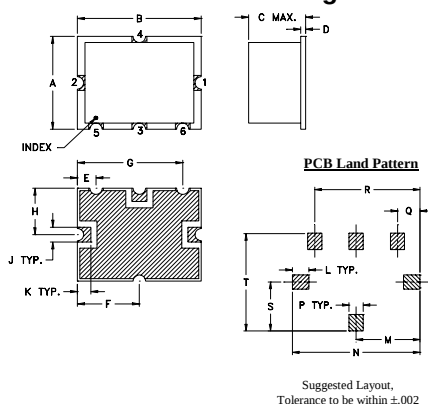
Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
LO & RF Power	16 dBm

Pin Connections

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

Outline Drawing

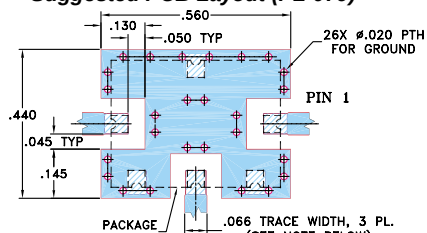


Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J
.375	.500	.23	.020	.075	.250	.425	.187	.050
9.53	12.70	5.84	0.51	1.91	6.35	10.80	4.75	1.27

K	L	M	N	P	Q	R	S	T	wt.
.050	.070	.270	.540	.060	.095	.445	.208	.415	grams
1.27	1.78	6.86	13.72	1.52	2.41	11.30	5.28	10.54	0.8

Demo Board MCL P/N: TB-12 Suggested PCB Layout (PL-079)



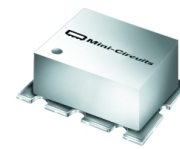
- NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. GROUND PAD SHALL BE FREE OF SOLDER MASK IF REQUIRED FOR SOLDERING.
3. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER), SEE NOTE 2.
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- high IP3, 25 dBm typ.
- compression, 3 dB higher than LO power

Applications

- base stations
- communication systems
- PCS



CASE STYLE: TTT167
PRICE: \$12.95 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.

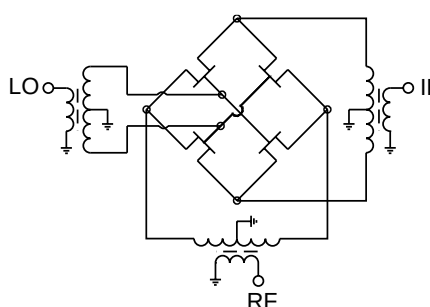
Electrical Specifications

FREQUENCY (MHz)			CONVERSION LOSS (dB)			RF in at 1dB Compr (dBm)	IP3 (dBm)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
RF	LO	IF	Typ.	σ	Max.	Typ.	Typ.	Typ.	Min.	Typ.	Min.
1850-1910	2090-2150	180-300	7.2	0.3	8.9	+13	25	28	20	19	13

Typical Performance Data

Frequency		Conversion Loss (dB)	Isolation L-R	Isolation L-I	VSWR RF Port	VSWR LO Port	IP3 (dBm)
RF MHz	LO MHz	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
1850.00	2090.00	7.13	30.85	18.78	1.47	3.30	26.91
1856.00	2096.00	7.14	31.01	18.86	1.48	3.43	27.08
1862.00	2102.00	7.12	30.97	18.95	1.49	3.60	27.21
1868.00	2108.00	7.09	30.94	18.99	1.48	3.73	26.47
1874.00	2114.00	7.09	31.16	18.98	1.47	3.80	26.48
1880.00	2120.00	7.09	31.50	18.96	1.46	3.83	25.46
1886.00	2126.00	7.10	31.74	18.95	1.46	3.86	25.49
1898.00	2138.00	7.16	31.79	19.07	1.48	4.02	25.44
1904.00	2144.00	7.16	31.71	19.20	1.48	4.04	25.63
1910.00	2150.00	7.20	31.89	19.28	1.47	4.06	25.32

electrical schematic



Performance Charts

HJK-21LH+ HJK-21LH

