

High IP3 Frequency Mixer

Level 13 (LO Power +13 dBm) 818 to 853 MHz

HJK-9MH+ HJK-9MH



CASE STYLE: TTT167
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.

Maximum Ratings

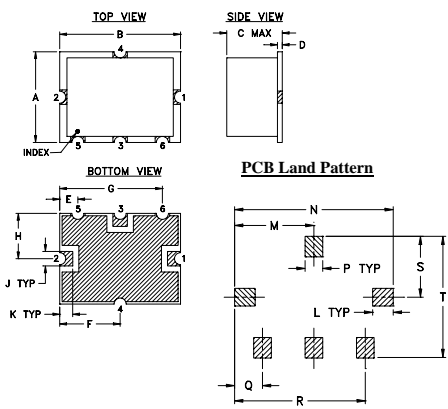
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
LO & RF Power	+16 dBm

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

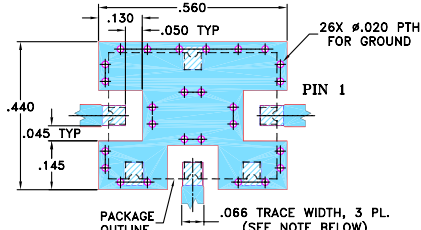
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K
.38	.50	.23	.020	.075	.250	.425	.187	.050	.050
9.65	12.70	5.84	0.51	1.91	6.35	10.80	4.75	1.27	1.27
L	M	N	P	Q	R	S	T	wt.	
.070	.270	.540	.060	.095	.445	.208	.415	grams	
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, 31 dBm typ.
- compression, 3 dB higher than LO power

Applications

- base stations
- communication systems
- cellular

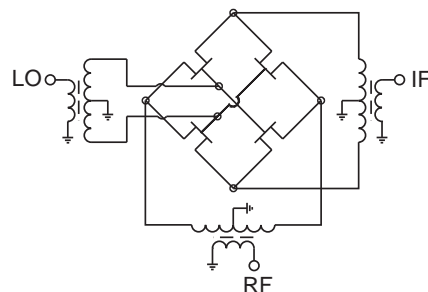
Electrical Specifications

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.
818-853	753-778	40-100	6.7	0.2	8.0	+16	31	37	24	27	20

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
818.00	753.00	6.96	36.96	30.52	1.56	1.58	30.64
821.50	755.50	6.96	36.92	30.35	1.55	1.58	30.90
825.00	758.00	6.94	36.90	30.19	1.55	1.61	30.37
828.50	760.50	6.92	36.88	30.07	1.55	1.66	30.97
832.00	763.00	6.88	36.82	29.91	1.55	1.67	30.78
835.50	765.50	6.86	36.86	29.79	1.55	1.69	30.89
839.00	768.00	6.85	36.85	29.69	1.55	1.73	31.18
842.50	770.50	6.84	36.93	29.68	1.55	1.78	30.90
846.00	773.00	6.86	36.95	29.56	1.55	1.79	30.66
849.50	775.50	6.86	36.98	29.50	1.54	1.81	30.54
853.00	778.00	6.86	36.96	29.39	1.54	1.84	30.69

Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

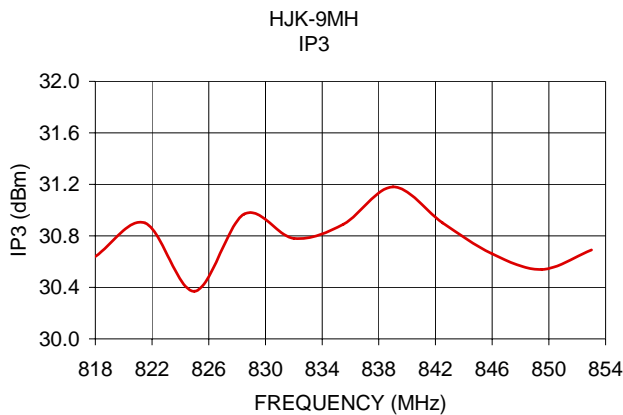
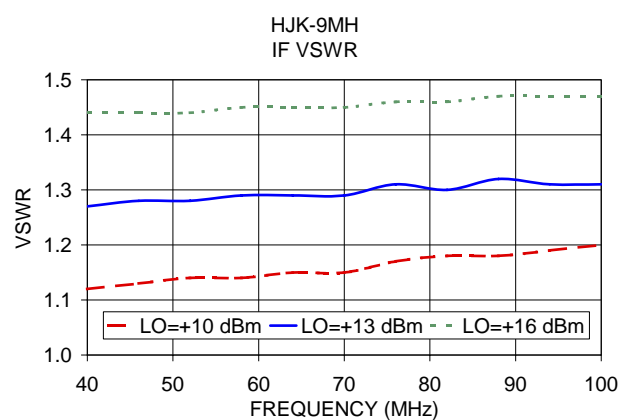
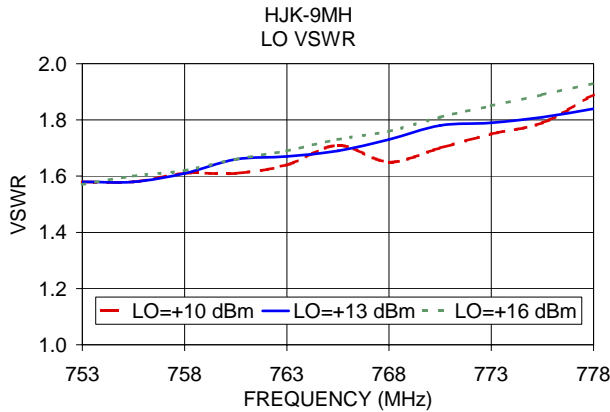
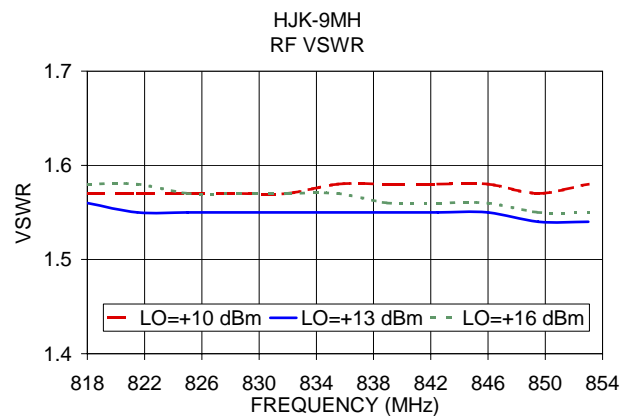
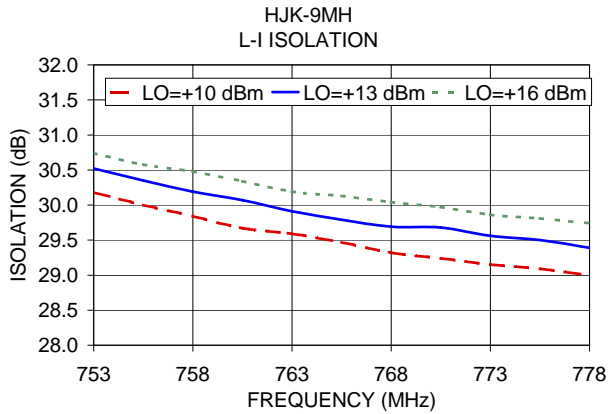
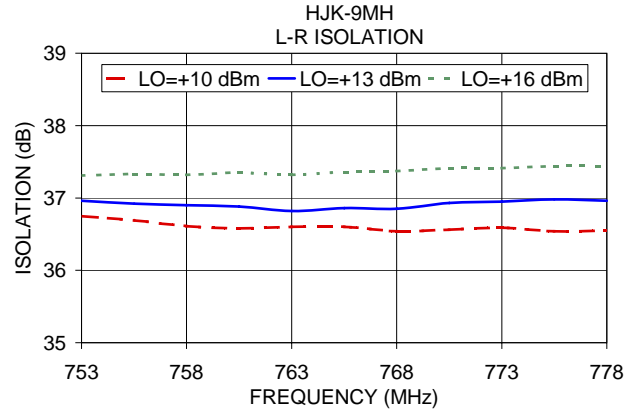
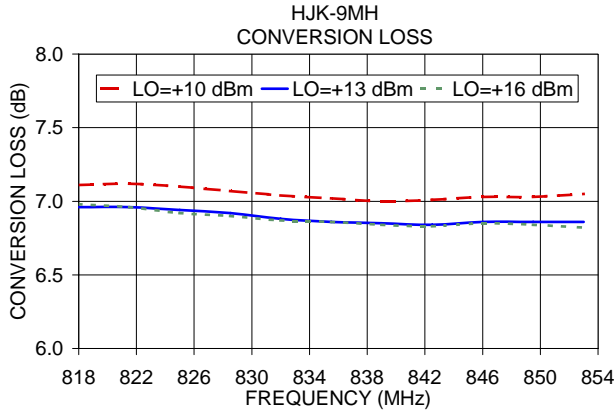
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Performance Charts

HJK-9MH+ HJK-9MH



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