

High IP3

Frequency Mixer

Level 17 (LO Power +17 dBm) 1850 to 2910 MHz

HJK-2911H+



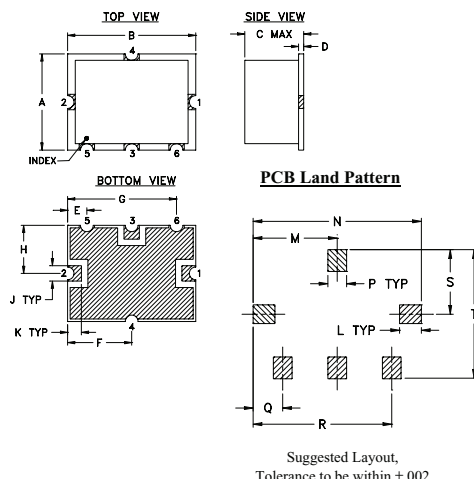
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
LO Power	+21 dBm
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

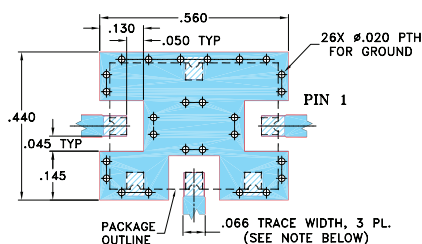
Outline Drawing



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:

- 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.
- THE USE OF SOLDER MASK OVER THE GROUND AREA UNDER THE UNIT AS SHOWN IS RECOMMENDED TO PREVENT POTENTIAL SHORTING. IF USER CHOOSES TO EXPOSE METAL UNDER THE ENTIRE UNIT GROUND PAD FOR IMPROVED GROUNDING, IT IS RECOMMENDED A SOLDER MASK DAM BE APPLIED AROUND EACH GROUND PAD TO ENSURE FILLET AND CONNECTION AT GROUND PADS.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

Features

- high IP3, 28 dBm typ.
- low spurious
- 2RF-LO, -78 dBc typ.
- 2LO-2RF, -78 dBc typ.
- protected by US patent 6,807,407

Applications

- PCS
- IMT-2000

CASE STYLE: TTT881
PRICE: \$16.95 ea. QTY (1-9)

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications (T_{AMB}=25°C)

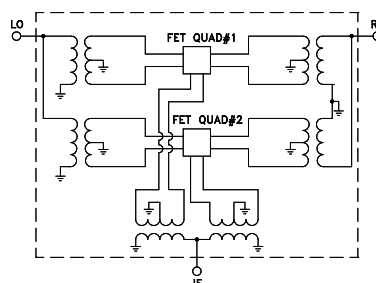
FREQUENCY (MHz)			CONVERSION LOSS (dB)			SECOND ORDER I.M.* (dBc) Max.		RF in at 1dB Compr (dBm)	IP3 (dBm)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
RF	LO	IF	X	σ	Max.	2RF-LO	2LO-2RF	Typ.	Typ.	Typ.	Min.	Typ.	Min.
1850-1910	2480-2910	570-1000	8.2	0.2	9.5	-64	-64	17	28	39	28	33	26

* Tested @ RF Power-14 dBm.

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO Port (:1)	2RF-LO (dBc)	2LO-2RF (dBc)	IP3 (dBm)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
1910.00	2480.00	8.10	46.45	39.28	4.33	-96.58	30.37
1910.00	2523.00	8.13	42.96	37.40	3.20	-85.27	29.44
1910.00	2566.00	8.09	41.03	36.33	3.46	-84.00	30.70
1910.00	2609.00	8.18	39.00	34.99	2.66	-80.10	28.81
1910.00	2652.00	8.14	37.97	34.33	2.78	-79.28	30.07
1910.00	2695.00	8.26	36.72	33.03	2.31	-77.38	28.40
1910.00	2738.00	8.22	36.80	32.73	2.38	-78.70	28.80
1910.00	2781.00	8.26	36.54	31.77	2.15	-79.13	27.88
1910.00	2824.00	8.34	36.88	31.83	2.23	-76.75	27.16
1910.00	2867.00	8.34	35.60	30.89	2.15	-76.97	27.26
1910.00	2910.00	8.48	34.66	31.11	2.29	-79.45	26.40

Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

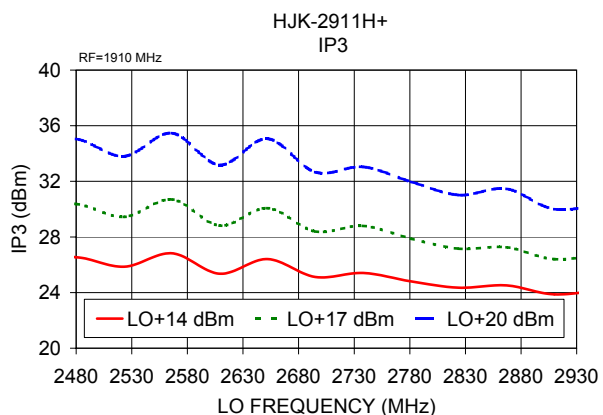
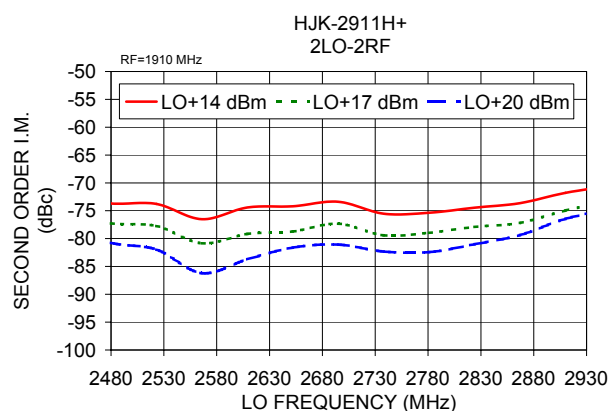
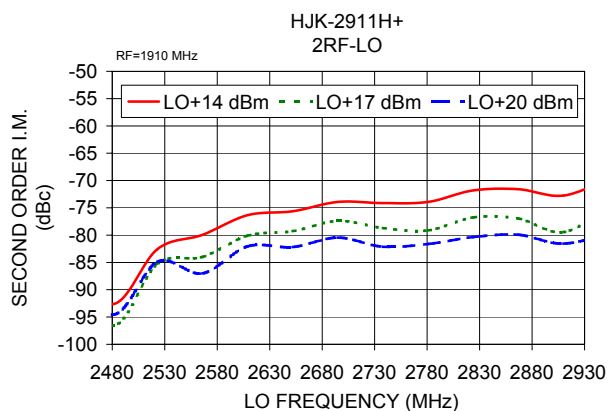
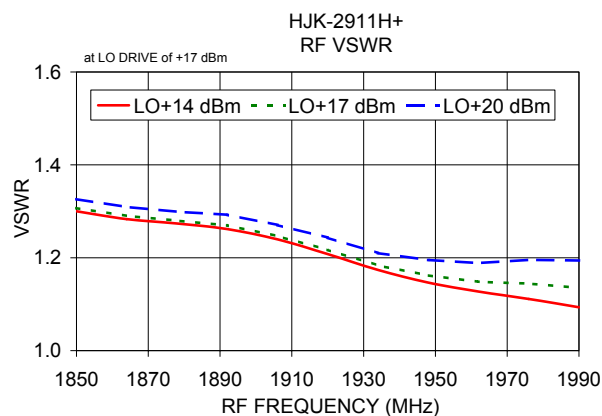
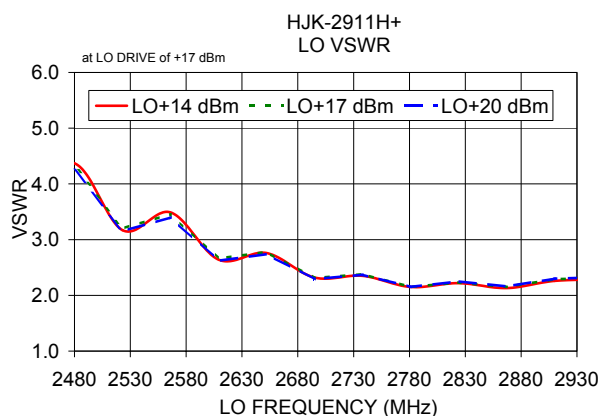
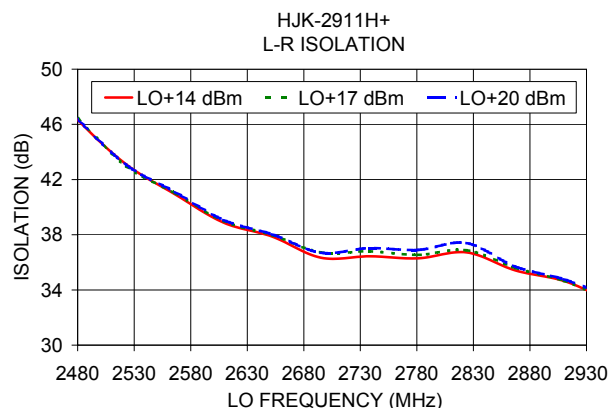
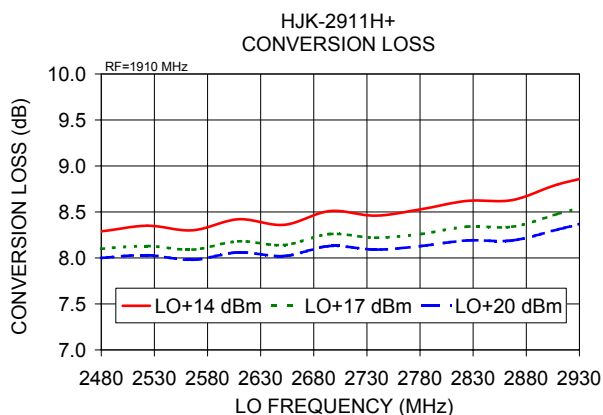
IF/RF MICROWAVE COMPONENTS

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Performance Charts

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