

High IP3 Frequency Mixer

Level 17 (LO Power +17 dBm) 1850 to 1910 MHz

HJK-21H+
HJK-21H

Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

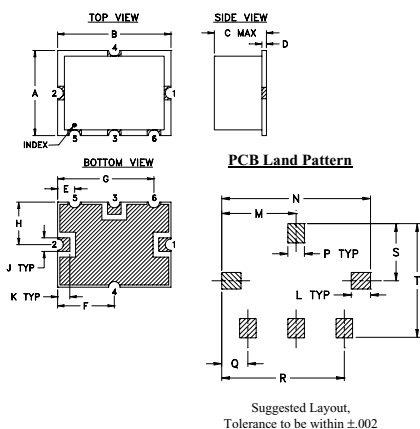
LO & RF Power +20 dBm

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

Pin Connections

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

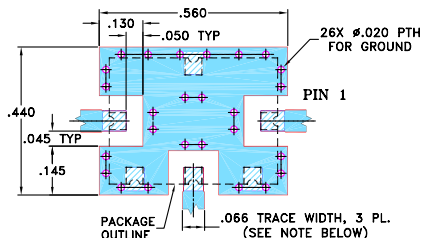
Outline Drawing



Outline Dimensions (inch)

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)



Features

- high IP3, 36 dBm typ.
- compression, 3 dB higher than LO power

Applications

- base stations
- communication systems
- PCS



CASE STYLE: TTT167

Price: Contact Sales Department

+ 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

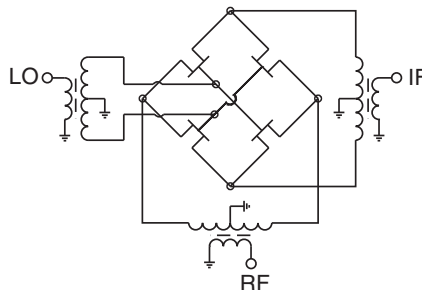
FREQUENCY (MHz)			CONVERSION LOSS (dB)			RF in at 1dB Compr (dBm)	IP3 (dBm)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
RF	LO	IF	Typ.	σ	Max.	Typ.	Typ.	Typ.	Min.	Typ.	Min.
1850-1910	2090-2150	180-300	7.6	0.2	8.9	+20	36	28	20	28	18

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Typical Performance Data

Frequency		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)	IP3 (dBm)
RF MHz	LO MHz	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
1850.00	2090.00	7.52	27.66	25.10	1.93	1.55	36.86
1856.00	2096.00	7.57	28.09	25.51	1.93	1.59	36.01
1862.00	2102.00	7.55	28.31	25.75	1.93	1.53	34.48
1868.00	2108.00	7.54	27.91	25.18	1.94	1.52	37.79
1874.00	2114.00	7.52	27.94	25.41	1.95	1.57	33.82
1880.00	2120.00	7.50	29.37	26.90	1.95	1.53	34.28
1886.00	2126.00	7.52	28.03	25.59	1.96	1.63	36.44
1892.00	2132.00	7.43	28.40	25.88	1.96	1.59	34.76
1898.00	2138.00	7.46	28.17	25.61	1.95	1.68	34.57
1904.00	2144.00	7.48	29.94	27.55	1.94	1.62	37.36
1910.00	2150.00	7.54	29.98	27.61	1.94	1.62	35.30

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

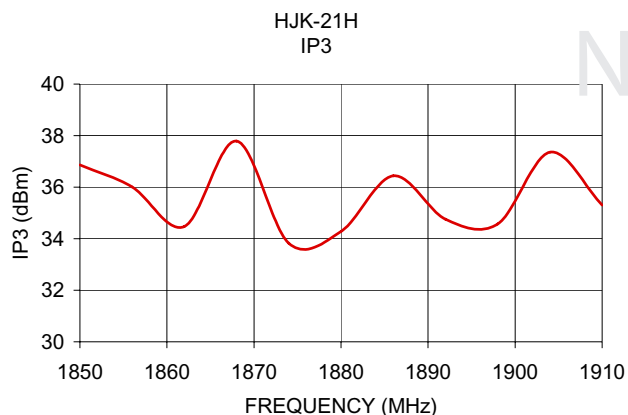
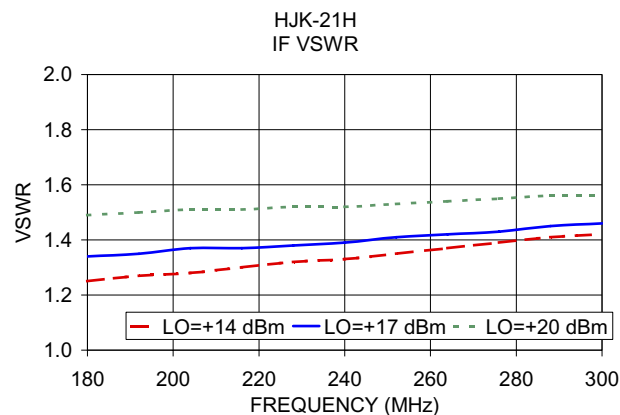
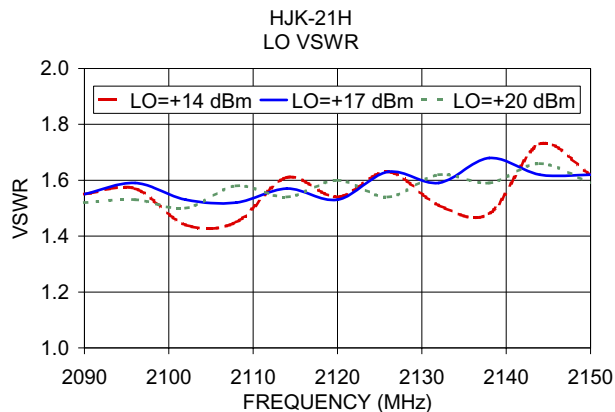
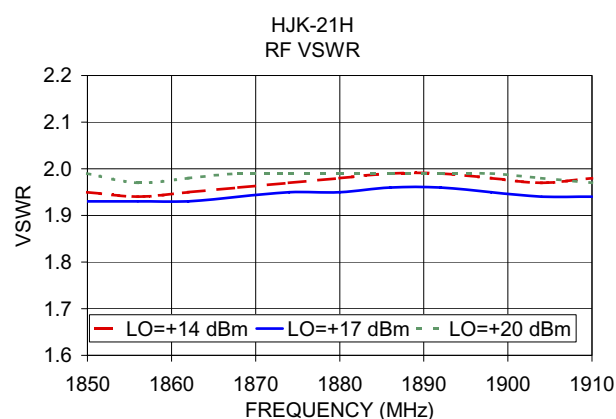
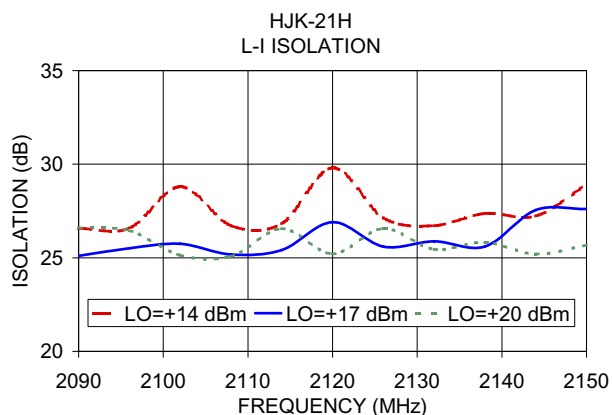
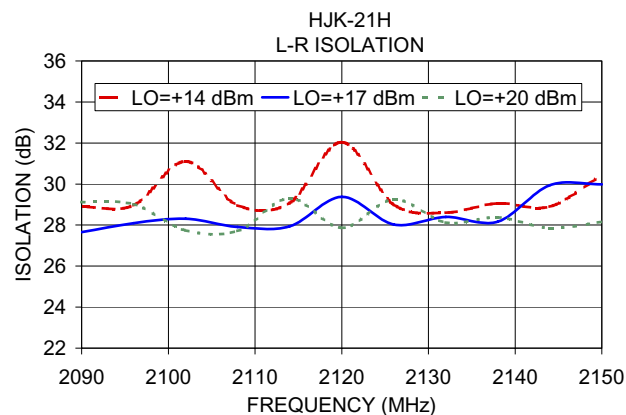
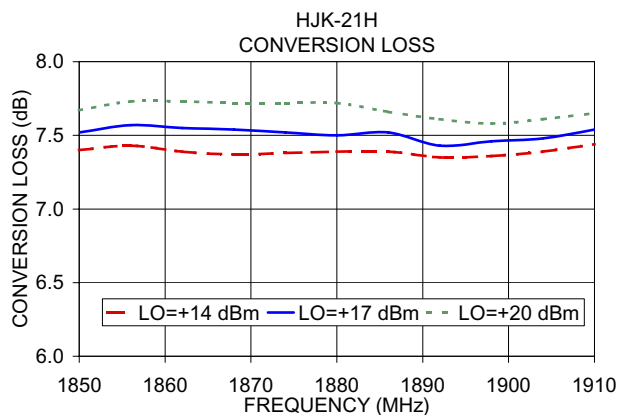
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For detailed performance specs
& shopping online see web site

Rev. F
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ED-8939/1
HJK-21H
DJ/TD/AM
100519
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Performance Charts

HJK-21H+ HJK-21H



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IF/RF MICROWAVE COMPONENTS

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