

High IP3 Frequency Mixer

HJK-21H+ HJK-21H

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



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

Features

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

CASE STYLE: TTT167

Price: Contact Sales Department

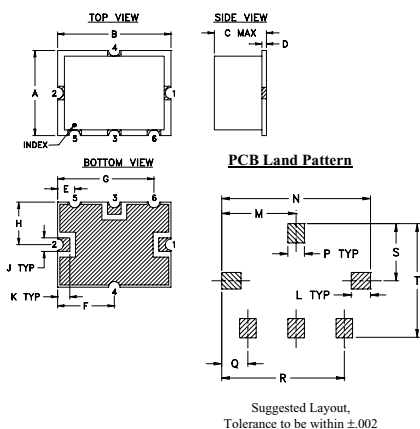
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Applications

- base stations
- communication systems
- PCS

Outline Drawing

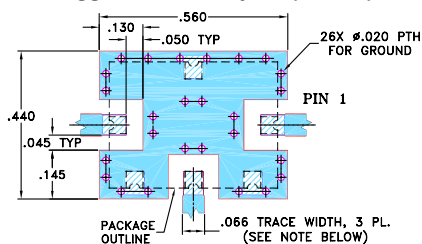


Outline Dimensions (inch)

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)



Electrical Specifications

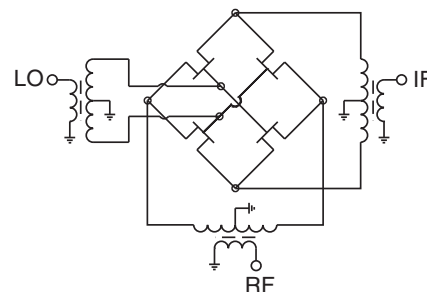
FREQUENCY (MHz)			CONVERSION LOSS (dB)			RF in at 1dB Compr (dBm)	IP3 (dBm)	LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)	
RF	LO	IF	Typ.	σ	Max.	Typ.	Typ.	Typ.	Min.	Typ.	Min.
1850-1910	2090-2150	180-300	7.6	0.2	8.9	+20	36	28	20	28	18

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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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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

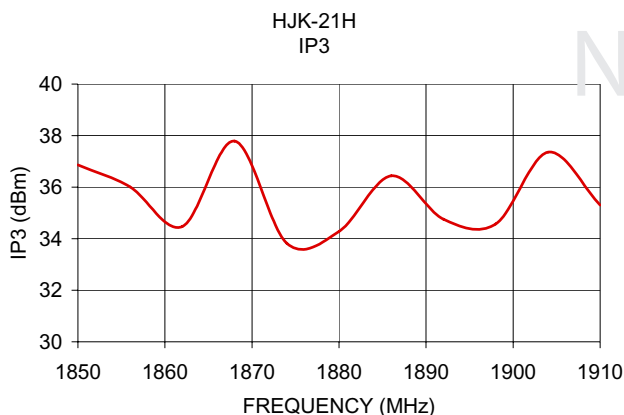
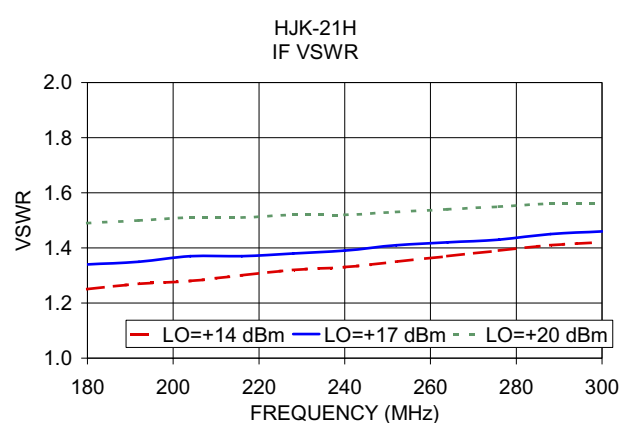
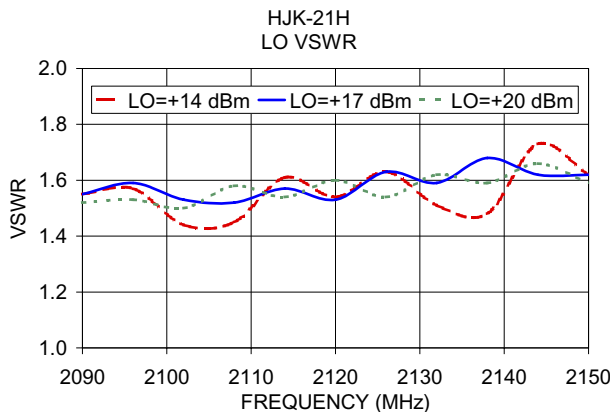
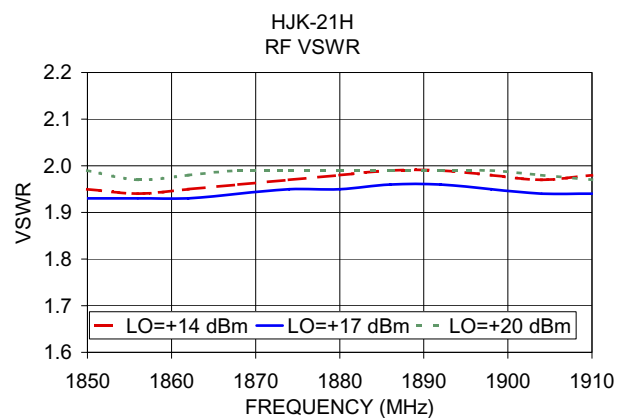
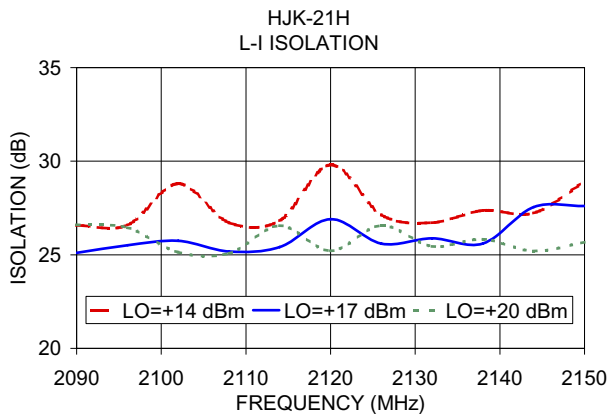
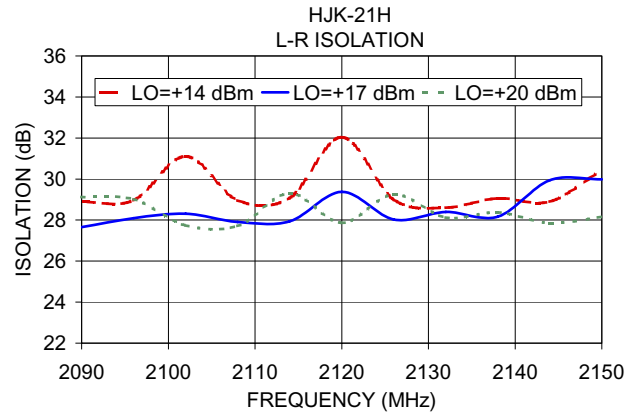
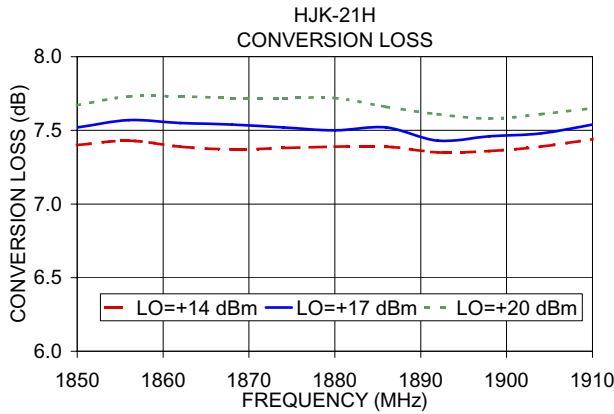
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HJK-21H
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Page 1 of 2

Performance Charts

HJK-21H+ HJK-21H



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IF/RF MICROWAVE COMPONENTS

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