

Wideband Frequency Mixer

HJK-272MH+

Level 13 (LO Power +13 dBm) 600 to 2700 MHz



CASE STYLE: TTT881
PRICE: \$8.95 ea. QTY. (10)

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.

Pad Connections

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

Features

- wide band, 600 to 2700 MHz
- good L-R isolation, 37 dB typ.
- protected by US Patent 6,807,407

Applications

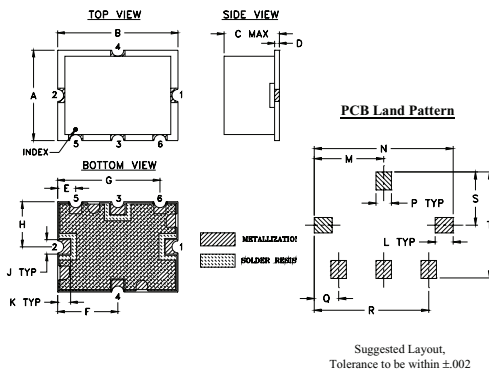
- base stations
- communication systems
- cellular
- PCS
- DCS
- radar

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

Electrical Specifications at 25°C

Parameter	Min.	Typ.	Max.	Unit
Frequency Range, RF/LO	600	—	2700	MHz
Frequency Range, IF	10	—	1000	MHz
Conversion Loss	—	7.4	9.0	dB
LO to RF Isolation	28	37	—	dB
LO to IF Isolation	20	27	—	dB
IP3	—	21	—	dBm
RF Input Power at 1 dB Compression	—	+16	—	dBm

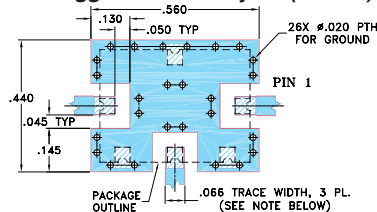
Outline Drawing



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		
1.78	6.86	13.72	1.52	2.41	11.30	5.28	10.54		0.8

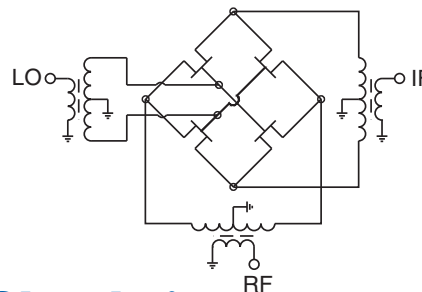
Demo Board MCL P/N: TB-12 Suggested PCB Layout (PL-079)



Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)	IP3 (dBm)
RF	LO	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
597.00	627.00	7.44	37.11	36.89	2.58	4.40	22.10
642.50	672.50	7.28	38.22	36.20	2.43	4.39	22.41
733.50	763.50	7.00	39.37	37.18	2.19	4.23	22.27
824.50	854.50	6.88	53.10	35.57	2.04	4.08	22.12
900.00	930.00	6.83	55.81	31.90	1.96	3.94	22.33
1047.00	1077.00	6.68	50.14	29.64	1.88	3.57	21.18
1120.50	1150.50	6.64	45.95	28.86	1.78	3.38	21.47
1267.50	1297.50	6.68	43.96	28.54	1.70	3.09	21.73
1341.00	1371.00	6.70	44.91	29.03	1.67	3.00	21.54
1414.50	1444.50	6.80	47.05	29.45	1.62	2.97	22.02
1561.50	1591.50	7.09	45.49	30.79	1.62	3.07	23.43
1671.75	1701.75	7.26	48.74	32.45	1.49	3.20	23.21
1745.25	1775.25	7.04	50.07	34.48	1.34	3.31	21.92
1818.75	1848.75	6.94	48.54	36.93	1.23	3.40	21.27
1965.75	1995.75	6.75	43.78	40.52	1.08	3.51	21.23
2039.25	2069.25	6.73	42.71	40.82	1.06	3.51	21.12
2186.25	2216.25	6.73	42.66	37.01	1.14	3.40	20.68
2333.25	2363.25	6.92	57.54	33.28	1.31	3.14	21.18
2640.00	2670.00	7.38	44.82	28.76	1.72	2.71	21.95
2800.00	2830.00	7.83	41.68	28.65	1.94	2.58	21.76

Electrical Schematic



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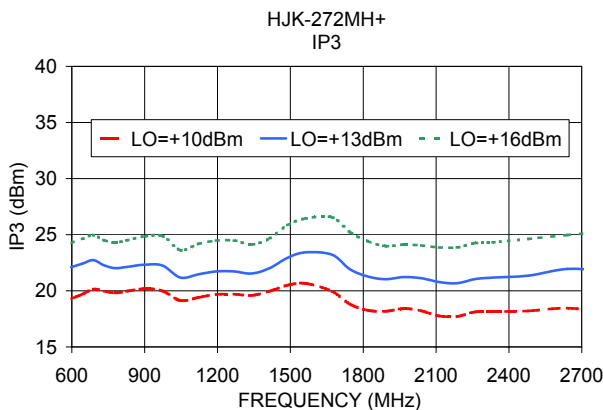
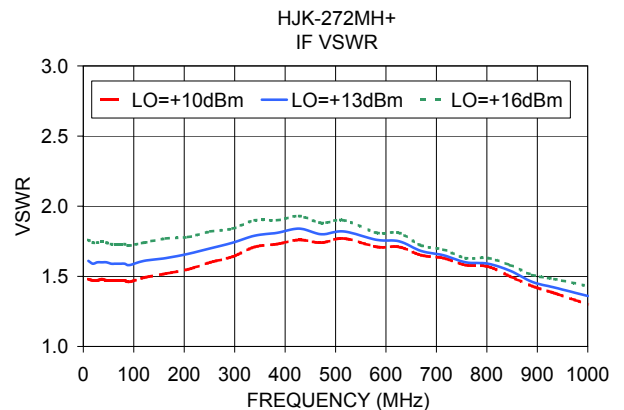
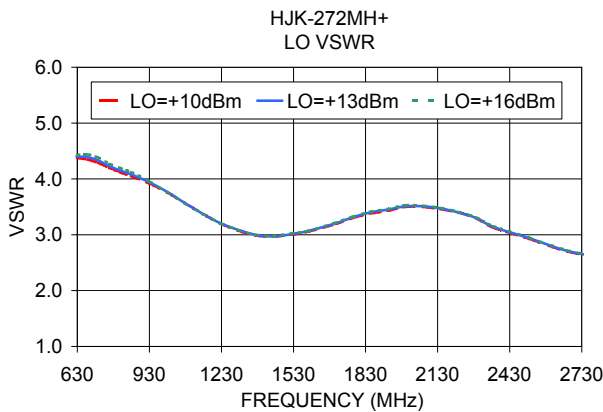
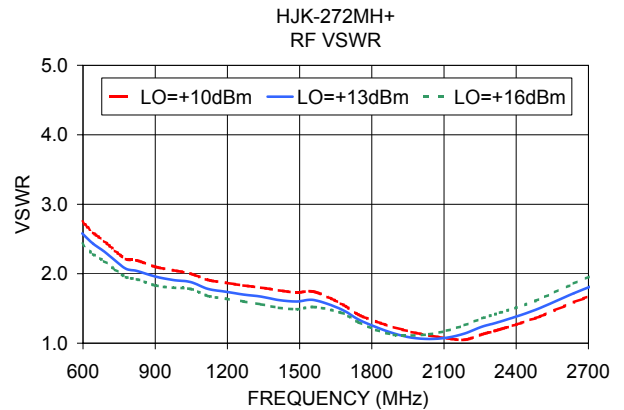
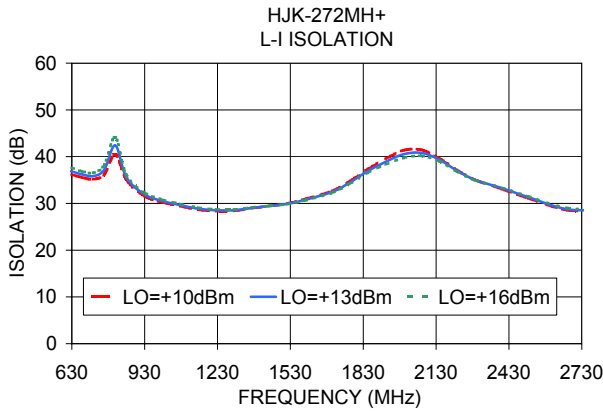
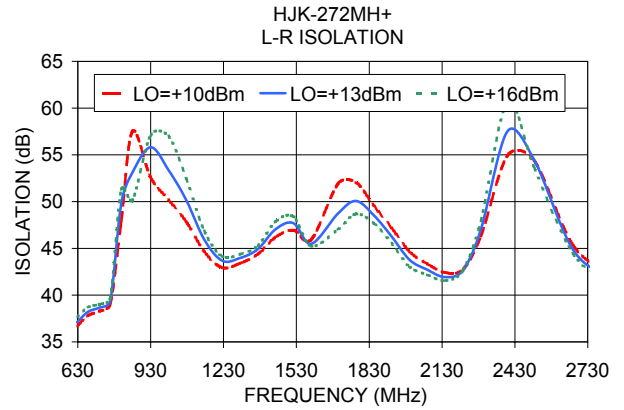
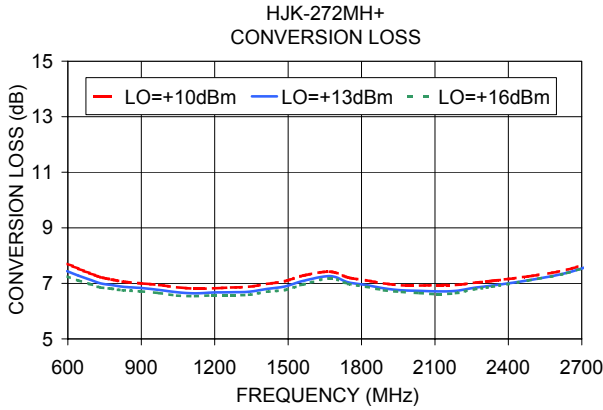
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Performance Charts

HJK-272MH+



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