

Surface Mount

Frequency Mixers

818 to 1910 MHz

NEW

HIGH IP3



HJK



HUD

Features

- high IP3, up to 38 dBm
- compression, 3 dB higher than LO power

Applications

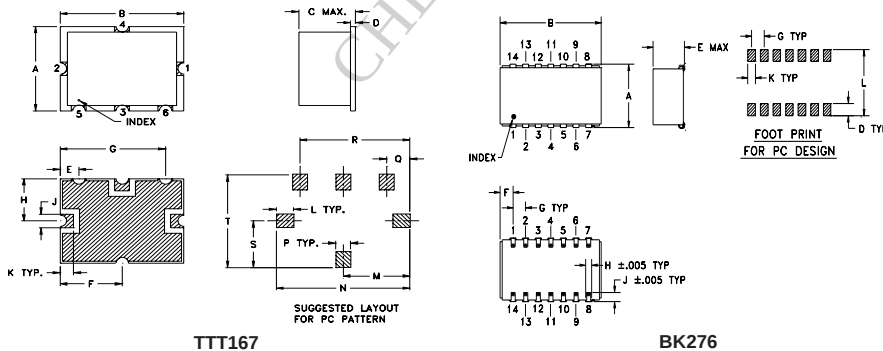
- base stations
- communication systems, cellular, PCS

Electrical Specifications

MODEL NO.	FREQUENCY (MHz)			LO level (dBm)	IP3 (dBm) Typ.	RF @ 1dB compr. (dBm) Typ.	CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		CASE STYLE	C O N N E C T I O N	PRICE \$ Qty. (1-9)
	RF	LO	IF				Typ.	σ	Max.	Typ.	Min.	Typ.	Min.			
HJK-9	818-853	753-778	40-100	7	22	10	7.1	0.3	8.7	36	24	26	20	TTT167	x	10.95
HJK-19	1850-1910	1780-1840	70-130	7	21	10	8.0	0.2	9.5	30	20	24	16	TTT167	x	10.95
HJK-21	1850-1910	2090-2150	180-300	7	22	10	7.5	0.3	9.5	28	18	19	13	TTT167	x	10.95
HJK-9LH	818-853	753-778	40-100	10	27	13	6.7	0.2	8.0	37	24	27	20	TTT167	x	12.95
HJK-19LH	1850-1910	1780-1840	70-130	10	25	13	7.5	0.2	9.4	30	20	23	15	TTT167	x	12.95
HJK-21LH	1850-1910	2090-2150	180-300	10	25	13	7.2	0.3	8.9	28	20	19	13	TTT167	x	12.95
HJK-9MH	818-853	753-778	40-100	13	31	16	6.7	0.2	8.0	37	24	27	20	TTT167	x	14.95
HJK-19MH	1850-1910	1780-1840	70-130	13	30	16	7.4	0.2	8.9	30	20	23	15	TTT167	x	14.95
HJK-21MH	1850-1910	2090-2150	180-300	13	29	16	7.2	0.2	8.9	29	20	19	13	TTT167	x	14.95
HJK-3H*	140-180	160	0.5-20	16	37	19	8.0	0.1	9.2	44	35	44	30	TTT167	x	16.95
HUD-3H*	140-180	160	0.5-20	16	37	19	8.1	0.1	9.2	47	40	45	38	BK276	mx	15.95
HJK-9H	818-853	753-778	40-100	17	33	20	6.7	0.2	8.0	35	24	31	23	TTT167	x	16.95
HJK-19H	1850-1910	1780-1840	70-130	17	34	20	7.7	0.2	8.9	28	20	22	16	TTT167	x	16.95
HJK-21H	1850-1910	2090-2150	180-300	17	36	20	7.6	0.2	8.9	28	20	25	18	TTT167	x	16.95
HUD-19SH*	1819-1910	1710-1769	50-200	19	38	22	7.5	0.2	8.9	38	27	36	25	BK276	mx	19.95

*Patent pending

Outline drawings



Maximum Ratings

Operating Temperature -20°C to 85°C

Storage Temperature -55°C to 100°C

LO & RF Power 16 dBm for level 7,10,13

19 dBm for level 16

20 dBm for level 17

22 dBm for level 19

Pin Connections

PORT	x	mx
LO	2	1
RF	1	8
IF	3	5
GROUND	4,5,6	OTHERS
DEMO BOARD	TB-12	TB-107

Outline dimensions (inch mm)

case no.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt. grams.
TTT167	.375	.500	.23	.020	.075	.250	.425	.187	.050	.050	.070	.270	.540	.060	.095	.445	.208	.415	.8
	9.53	12.70	5.84	0.51	1.91	6.35	10.80	4.75	1.27	1.27	1.78	6.86	13.72	1.52	2.41	11.30	5.28	10.54	
BK276	.470	.803	—	.100	.250	.102	.100	.047	.065	.065	.490								3.0
	11.94	20.40	—	2.54	6.35	2.59	2.54	1.19	1.65	1.65	12.45								



Distribution Centers NORTH AMERICA 800-654-7949 • 417 335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

ISO 9001 CERTIFIED

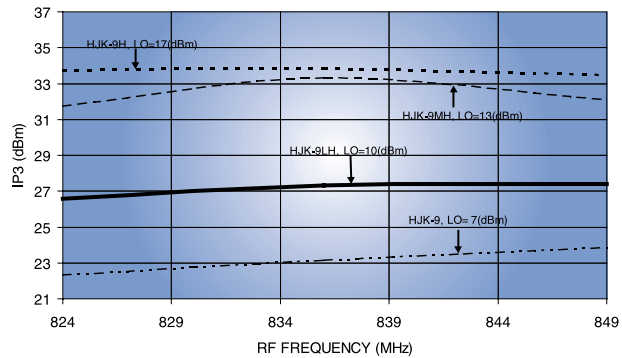
INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

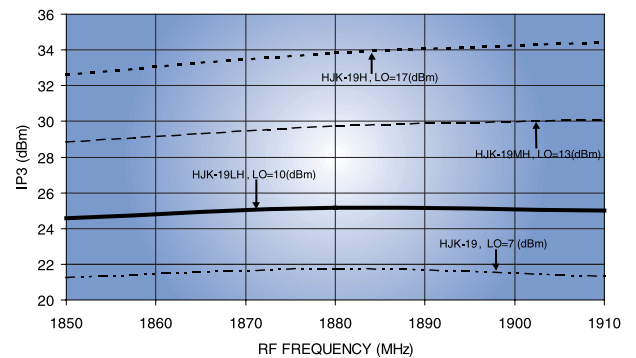
REV. B
M75341
HJK-3H
HUD-3H
HJK-9H
HJK-9/9LH/9MH
HJK-19H
HJK-19/19LH/19MH
HJK-21H
HJK-21/21LH/21MH
HUD-19SH
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EDR-5182/1
EDR-5182/2
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ED-8702A/1
ED-8702A/3
ED-8939/1
ED-8939/2
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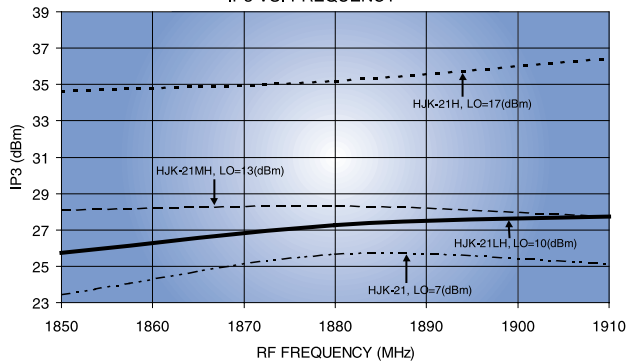
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IP3 VS. FREQUENCY



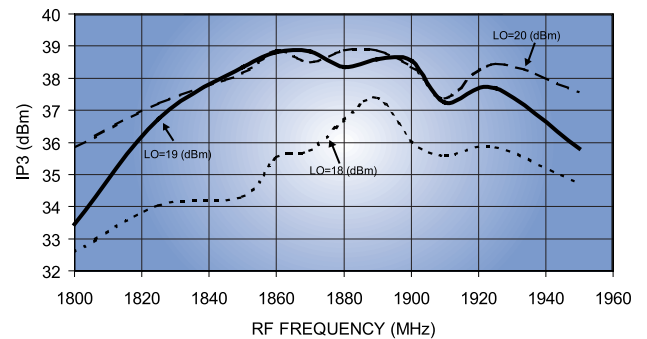
HJK-19/-19LH/-19MH/-19H
IP3 VS. FREQUENCY



HJK-21/-21LH/-21MH/-21H
IP3 VS. FREQUENCY



HUD-19SH
IP3 VS. FREQUENCY



electrical schematic

