

Frequency Mixers

LO Power Level 17 dBm

Pin Configuration

Port	LO	RF	IF	Gnd	Ext.	Case	Gnd	Not Used
f	8	1	3,4^	2,5,6,7	2,5,6,7	-	-	-

^ pins must be connected together externally.

Outline Drawing

Case Style - A05 (inch,mm) weight: 3.7 grams.

A	B	C	D	E	F	G	H	J
.770	.800	.240	.250	.370	.400	.200	.20	.14
19.558	20.320	6.096	6.350	9.398	10.160	5.080	5.080	3.556
K	L	M	N	P	Q	R	S	T
.031								
0.787								

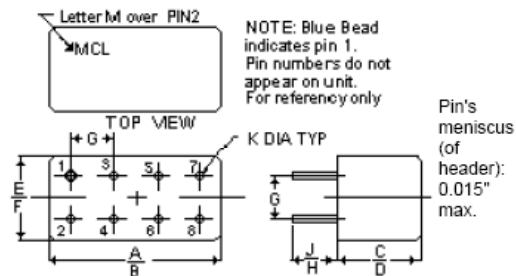
Tolerance: .X ± .1 .XX ± .03 .XXX ± .015 inch.

Material and Finish:

Header material: C.R.S. Pin material: #52 alloy. Finish: electro tin, hot-oil flowed. Cover material:upro-nickel.

Mounting:

Insulated spacer available. Request P/N B14-045-01.

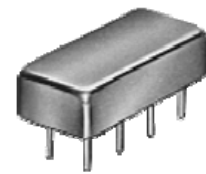


Special Tolerances:

Pin diameter ±.005 inch.

Notes:

- +17 dBm LO, up to +14 dBm RF
- Absolute maximum power, voltage and current ratings:
 - a. RF power, 200mW
 - b. Peak IF current, 40mA
- Prices and Specifications subjects to change without notice.



TAK-1WH

Electrical Specifications

TAK-1WH LO Power Level 17 dBm											
Frequency MHz		Max. Conversion Loss dB			Min. LO-RF Isolation dB			Min. LO-IF Isolation dB			
LO/RF	IF	Mid-Band Total Range			L	M	U	L	M	U	
5.00-750	DC-750	7.5	9.0		40	30	25	35	25	20	

L=low range(f_L to $10f_L$) M=mid range($10f_L$ to $f_U/2$) U=upper range($f_U/2$ to f_U)

Typical Performance Data

TAK-1WH		Conversion Loss (dB)			ISO	Isolation L-R (dB)			Isolation L-I (dB)		
RF MHz	LO MHz	LO +14 dBm	LO +17 dBm	LO +20 dBm	LO (MHz)	LO +14 dBm	LO +17 dBm	LO +20 dBm	LO +14 dBm	LO +17 dBm	LO +20 dBm
5.000	35.000	6.44	5.75	5.40	5.000	63.21	63.53	63.16	62.44	62.84	61.66
10.000	40.000	6.71	5.93	5.59	10.000	60.61	59.56	58.73	58.61	57.61	56.43
20.000	50.000	6.82	5.97	5.63	20.000	53.05	51.08	49.78	50.79	48.85	47.53
50.000	80.000	6.65	5.91	5.58	50.000	48.56	46.53	45.24	46.69	44.54	43.10
100.000	70.000	6.42	5.77	5.50	100.000	44.90	42.94	41.66	43.39	41.21	39.71
125.840	95.840	6.37	5.75	5.50	125.840	42.70	40.60	39.29	41.34	39.07	37.47
175.770	145.770	6.52	5.75	5.62	175.770	39.41	37.40	36.36	38.36	36.16	34.68
225.700	195.700	6.23	5.81	5.70	225.700	37.49	35.63	34.38	36.43	34.27	32.56
250.670	220.670	6.05	5.69	5.57	250.670	36.98	35.33	34.09	35.78	33.54	31.82
300.600	270.600	5.90	5.68	5.62	300.600	35.68	34.13	32.77	33.89	32.33	30.98
350.540	320.540	6.35	6.07	5.86	350.540	35.68	33.75	32.20	32.12	30.78	28.82
400.470	370.470	6.52	6.22	6.09	400.470	36.84	33.94	31.64	30.75	29.35	29.06
450.410	420.410	6.67	6.24	6.03	450.410	37.12	33.76	30.28	30.47	28.19	27.53
500.000	470.000	6.57	6.26	6.13	500.000	38.12	35.44	30.87	29.58	29.36	28.25
525.310	495.310	6.76	6.57	6.49	525.310	34.09	33.37	31.19	27.93	28.37	27.67
550.270	520.270	7.00	6.80	6.59	550.270	32.10	31.48	30.06	25.43	26.00	26.48
600.210	570.210	7.76	6.81	6.15	600.210	30.58	29.25	28.48	22.32	22.84	23.46
650.140	620.140	8.29	6.95	6.32	650.140	33.79	29.21	28.09	24.38	20.68	21.00
700.080	670.080	9.21	7.41	6.49	700.080	34.07	32.78	28.16	25.57	22.79	20.71
750.000	720.000	9.92	7.73	6.59	750.000	32.38	31.78	29.59	24.04	24.62	22.77

RF/LO	VSWR RF port			VSWR LO port			IF	VSWR IF port			Ø detection		
FREQ. (MHz)	LO +14 dBm	LO +17 dBm	LO +20 dBm	LO +14 dBm	LO +17 dBm	LO +20 dBm	FREQ. (MHz)	LO +14 dBm	LO +17 dBm	LO +20 dBm	FREQ. MHz	max.DC output mV	DC offset mV
5.001	1.25	1.14	1.17	1.32	1.53	2.59	5.001	2.14	1.81	1.60	5.00	-934.50	0.56
10.000	1.22	1.06	1.11	1.21	1.52	2.59	10.000	2.14	1.81	1.60	10.00	-946.60	0.58
27.576	1.19	1.03	1.10	1.21	1.41	2.48	27.576	2.14	1.80	1.59	29.03	-949.30	0.56
50.000	1.16	1.04	1.12	1.12	1.54	2.54	50.000	2.15	1.81	1.60	50.00	-936.20	0.54
72.727	1.14	1.05	1.13	1.15	1.48	2.42	72.727	2.16	1.82	1.62	77.10	-951.20	0.66
100.000	1.13	1.05	1.13	1.17	1.48	2.27	100.000	2.20	1.85	1.63	101.13	-960.40	0.65
140.450	1.12	1.06	1.15	1.19	1.43	2.41	140.450	2.27	1.90	1.69	149.19	-1004.00	0.13