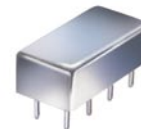


Frequency Mixer

Level 17 (LO Power +17 dBm) 2 to 500 MHz

TAK-1H+



Maximum Ratings

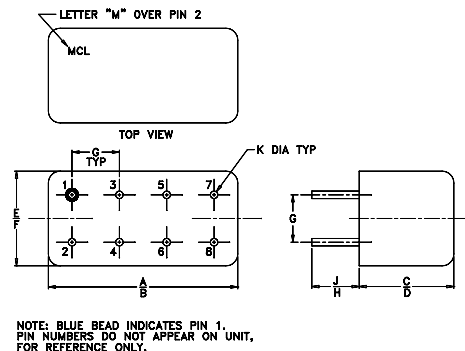
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

Pin Connections

LO	8
RF	1
IF	3,4 [^]
GROUND	2,5,6,7
CASE GROUND	2

[^] pins must be connected together externally

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.240	.250	.370	.400
19.56	20.32	6.10	6.35	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	3.7	

Features

- low conversion loss, 5.93 dB typ.
- high isolation, 40 dB typ. L-R, 35 dB typ. L-I
- rugged welded construction
- hermetically sealed

Applications

- VHF/UHF
- instrumentation
- defense & federal communications

CASE STYLE: A05
PRICE: \$25.70 ea. QTY (1-9)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
		Mid-Band m			L		M		U		L		M		U	
LO/RF	IF	\bar{X}	σ	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
2-500	DC-500	5.93	0.08	7.5	50	40	40	30	30	25	45	35	35	25	25	20

1 dB COMP.: +14 dBm typ.

L = low range [f_L to $10 f_L$]

M = mid range [$10 f_L$ to $f_U/2$]

U = upper range [$f_U/2$ to f_U]

m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
2.00	32.00	6.30	62.98	52.28	1.22	1.67
5.00	35.00	5.95	62.06	52.79	1.10	1.60
10.00	40.00	5.92	60.47	52.35	1.03	1.63
20.00	50.00	5.91	57.14	51.13	1.02	1.61
34.13	64.13	5.81	53.27	49.30	1.04	1.58
50.00	80.00	5.72	50.24	47.27	1.06	1.57
66.26	96.26	5.66	48.03	45.61	1.07	1.55
82.33	52.33	5.71	46.33	44.27	1.08	1.54
100.00	70.00	5.63	44.99	43.26	1.09	1.57
130.52	100.52	5.61	43.18	41.91	1.10	1.55
162.65	132.65	5.61	41.46	40.45	1.10	1.55
200.00	170.00	5.60	40.12	39.22	1.08	1.60
259.04	229.04	5.42	38.10	37.51	1.07	1.67
307.24	277.24	5.62	37.54	36.13	1.06	1.70
355.43	325.43	5.86	37.41	36.94	1.05	1.76
387.56	357.56	5.92	36.35	35.99	1.04	1.82
435.76	405.76	5.81	35.35	33.91	1.05	1.84
467.89	437.89	5.90	36.34	33.81	1.06	1.85
483.95	453.95	6.08	36.44	33.54	1.08	1.87
500.00	470.00	6.27	36.27	33.21	1.09	1.90

Electrical Schematic

