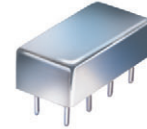


Frequency Mixer

TAK-1WH+

Level 17 (LO Power +17 dBm) 5 to 750 MHz



CASE STYLE: A05
PRICE: \$30.20 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.

Maximum Ratings

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

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

^ pins must be connected together externally

Features

- low conversion loss, 5.71 dB typ.
- high isolation, 40 dB typ. L-R, 35 dB typ. L-I
- rugged welded construction
- hermetically sealed

Applications

- VHF/UHF
- FM radio
- defense & federal communication
- instrumentation

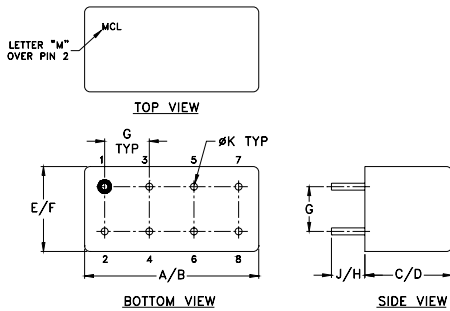
Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		Total Range Max.	Max.	L		M		U		L		M		U	
		\bar{X}	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
5-750	DC-750	5.71	0.08	7.5	9.0	50	40	40	30	30	25	45	35	35	25	30	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 $f_U/2$]

Outline Drawing



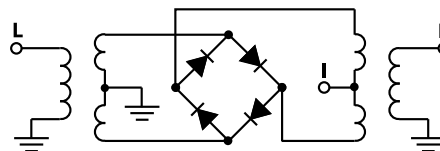
Outline Dimensions (inch/mm)

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	

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
5.00	35.00	5.75	63.53	62.84	1.14	1.53
10.00	40.00	5.93	59.56	57.61	1.06	1.52
20.00	50.00	5.97	51.08	48.85	1.03	1.41
50.00	80.00	5.91	46.53	44.54	1.04	1.54
100.00	70.00	5.77	42.94	41.21	1.05	1.48
125.84	95.84	5.75	40.60	39.07	1.05	1.48
175.77	145.77	5.75	37.40	36.16	1.06	1.43
225.70	195.70	5.81	35.63	34.27	1.08	1.45
250.67	220.67	5.69	35.33	33.54	1.10	1.40
300.60	270.60	5.68	34.13	32.33	1.14	1.51
350.54	320.54	6.07	33.75	30.78	1.19	1.44
400.47	370.47	6.22	33.94	29.35	1.24	1.56
450.41	420.41	6.24	33.76	28.19	1.28	1.60
500.00	470.00	6.26	35.44	29.36	1.32	1.59
525.31	495.31	6.57	33.37	28.37	1.35	1.68
550.27	520.27	6.80	31.48	26.00	1.37	1.74
600.21	570.21	6.81	29.25	22.84	1.39	1.68
650.14	620.14	6.95	29.21	20.68	1.38	1.89
700.08	670.08	7.41	32.78	22.79	1.35	1.94
750.00	720.00	7.73	31.78	24.62	1.29	1.96

Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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