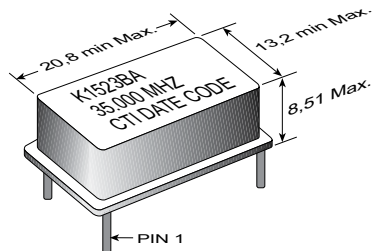


K1523BA Series

14 DIP, 5.0 Volt, TTL/HCMOS, VCXO



**THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS.
PLEASE REFER TO THE MV PRODUCT SERIES.**



APPLICATIONS Phase-Locked Loops (PLL's); Clock Recovery; Reference Signal Tracking; Synthesizers; Frequency Modulation/Demodulation
25.0 to 35.0 MHz Frequency Range
0.5V to 4.5V Control Voltage
±25ppm Stability
Variety of Deviation Sensitivity Options
-40°C to 85°C Operating Temperature

Ordering Information

Product Series K1523BA X -R 00.0000 MHz
Temperature Range
Blank: 0°C to +70°C
M: -40°C to +85°C
RoHS Compliance
Blank: non-RoHS compliant part
-R: RoHS compliant part
Frequency (customer specified)

ELECTRICAL SPECIFICATIONS

Model	K1523BA	
Frequency Range (MHz)	25 to 33	33.1 to 35
Input Current (mA)	< 26	
Frequency Control Function	(For Custom Deviation Range, Vc Range, etc. - Consult Factory)	
Deviation (ppm)		
Minimum	±100	
Maximum	±190	
Linearity (%)	< 10	
Modulation Bandwidth (±3dB)	> 20KHz	
Nominal Control Voltage (V)	2.5	
Control Voltage Range (V)	0.5 to 4.5	
Transfer Function	Positive	
Input Impedance	> 50KΩ @ 10KHz	
Frequency Stability (ppm)		
Overall	Inclusive of Calibration, Temperature, Voltage, Load and Aging	
0°C to +70°C	±25	±40
-40°C to +85°C	±50	±55
Temperature Range (°C)		
Operating	-40°C to +85°C	
Storage	-40°C to +125°C	
Supply Voltage (V)	+5.0V ±5%	
Symmetry (%) CMOS/TTL	40/60	
Start Up Time (ms)	<10	
SSB Phase Noise (dBC/Hz)	10Hz	-65
Offset from Carrier	100Hz	-95
	1KHz	-120
	10KHz	-140
	100KHz	-150

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.

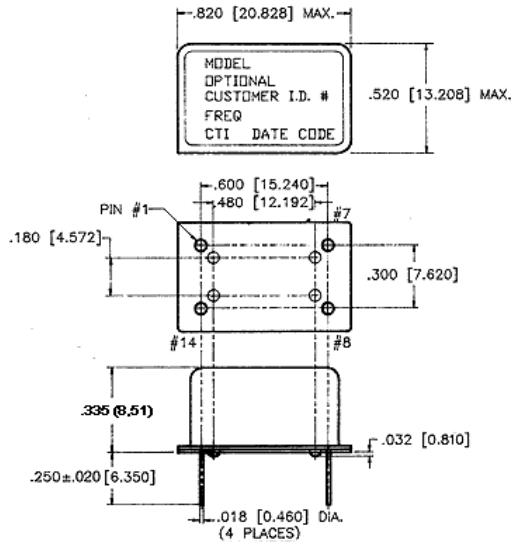
Revision: 03-09-07

K1523BA Series

14 DIP, 5.0 Volt, TTL/HCMOS, VCXO

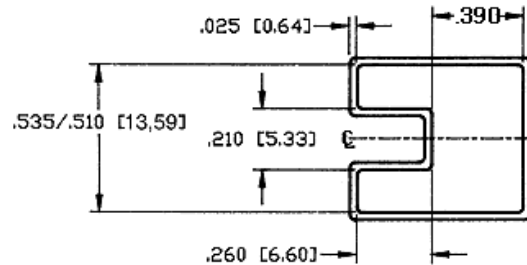


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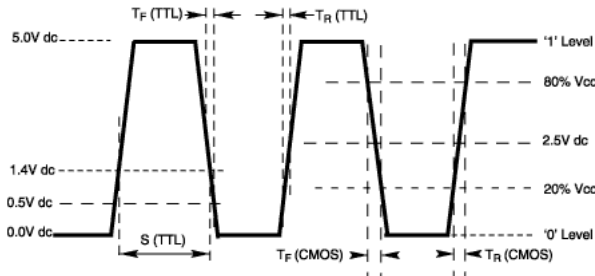
PIN	FUNCTION
1	Voltage Control
7	Gnd/ & Case Gnd
8	Output
14	+ V _{CC}

SHIPPING TUBE CROSS SECTION

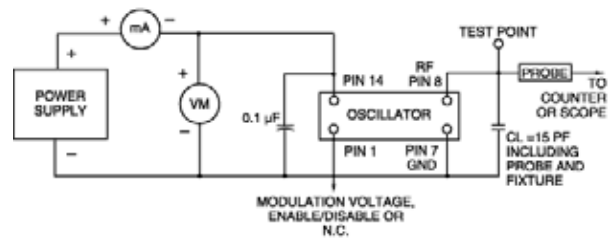


ALL DIMENSIONS ARE INSIDE

OUTPUT WAVEFORM



TEST CIRCUIT DIAGRAM



MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

TEST METHODS	REFERENCE PROCEDURES	DESCRIPTION
Temperature Cycle	MIL-STD-833, Mtd 1010, Cond. B	-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell
Mechanical Shock	MIL-STD-202, Mtd 213, Cond. D	500 g's
Vibration	MIL-STD 202, Mtd 204, Cond. B	10-2000 Hz; 0.06 inch; 15g; 3 planes
Humidity Steady State	MIL-STD-202, Mtd 103	40°C; 90%-95% R.H.; 56 days
Thermal Shock	MIL-STD-883, Mtd 1011.7 Cond. A	100°C to 0°C; Water-to-Water; 15 cycles
Electrostatic Discharge	MIL-STD-883, Mtd 3015 Class II	2 KV to 4 KV Threshold
Solderability	MIL-STD-883, Mtd 2022.2	Solder dip; Meniscograph Criteria
Hermeticity	MIL-STD-883, Mtd 1014.8, Cond. A1	Mass spectro. 2 x 10 ⁻⁸ atmos. CC/sec He
Resistance to Soldering	MIL-STD-202, Mtd 210A, Cond. C	240°C; 10 seconds: 1 inch/sec.
Lead Integrity	MIL-STD-883, Mtd 2004.5, Cond. A, B1	Lead tension & bend stress
Marking Permanence	MIL-STD-883, Mtd 2015.8	Resistance to solvents
Life Test	MIL-STD-883, Mtd 1005.6	125°C. powered. 1000 hours minimum

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