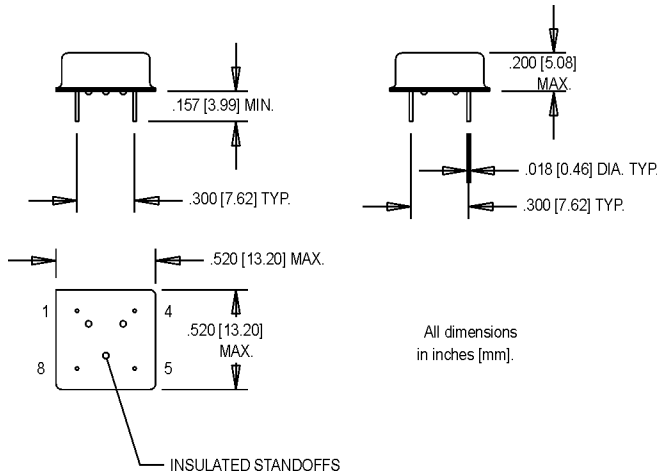


# K500 Series

8 pin DIP, 5.0 Volt, CMOS/TTL, Clock Oscillator



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



## Ordering Information

	K5XXBAC	X	X	X	00.0000 MHz
Stability					
00:	±100 ppm				
50:	±50 ppm				
25:	±25 ppm				
Logic Compatibility					
C:	CMOS				
Symmetry					
Blank:	40/60%				
S:	45/55% (Available to 50 MHz)				
Output Type					
Blank:	Fixed Frequency				
E:	Tri-state				
Temperature Range					
Blank:	0°C to +70°C				
M:	-40°C to +85°C				
Frequency (customer specified)					

## Pin Connection

PIN	FUNCTION
1	N/C or Tri-state
2	Ground
3	Output
4	+Vdd

Electrical Specifications	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
	Frequency Range	F	1		70	MHz	
	Frequency Stability	$\Delta F/F$	(See Ordering Information)				See Note 1
	Operating Temperature	T <sub>A</sub>	-40		+85	°C	
	Storage Temperature	T <sub>S</sub>	-55		+125	°C	
	Input Voltage	V <sub>dd</sub>	4.5	5.0	5.5	V	
	Input Current	I <sub>dd</sub>			15	mA	<20 MHz
					50	mA	20 - 70 Mhz
	Symmetry (Duty Cycle)		40		60	%	@ 1.4V TTL/0.5V <sub>cc</sub> CMOS
	Rise/Fall Time	Tr/Tf					
	≤20 MHz				8	ns	TTL
					10	ns	CMOS
	>20 Mhz				6	ns	TTL
					8	ns	CMOS
	Fanout				10		TTL
Environmental	Start up Time				10	ms	
	Temperature Cycle	MIL-STD-883, Method 1010, Condition B					-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell
	Mechanical Shock	MIL-STD-883, Method 2002, Condition B					1500 g's
	Vibration	MIL-STD-883, Method 2007, Condition B					20-2000 Hz; 0.06 inch; 15 g's; 3 planes
	Humidity Steady State	MIL-STD-202, Method 103					40°C; 90%-95% R.H.; 56 days
	Thermal Shock	MIL-STD-883, Method 1011.7, Condition B					100°C to 0°C; Water-to-Water; 15 cycles
	Electrostatic Discharge	MIL-STD-883, Method 3015, Class II					2 KV to 4 KV Threshold
	Solderability	MIL-STD-883, Method 2022.2					Solder dip; Meniscograph Criteria
	Hermeticity	MIL-STD-883, Method 1014.8, Condition A1					Mass spectro. 2 x 10 <sup>-8</sup> atoms. CC/sec He
	Resistance to Soldering	MIL-STD-202, Method 210D, Condition J					235°C; 30 seconds
	Lead Integrity	MIL-STD-883, Method 2004.5, Cond. A,B1					Lead tension & bend stress
	Marking Permanence	MIL-STD-883, Method 2015.8					Resistance to solvents
	Life Test	MIL-STD-883, Method 1005.6					125°C, powered, 1000 hours minimum

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.

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