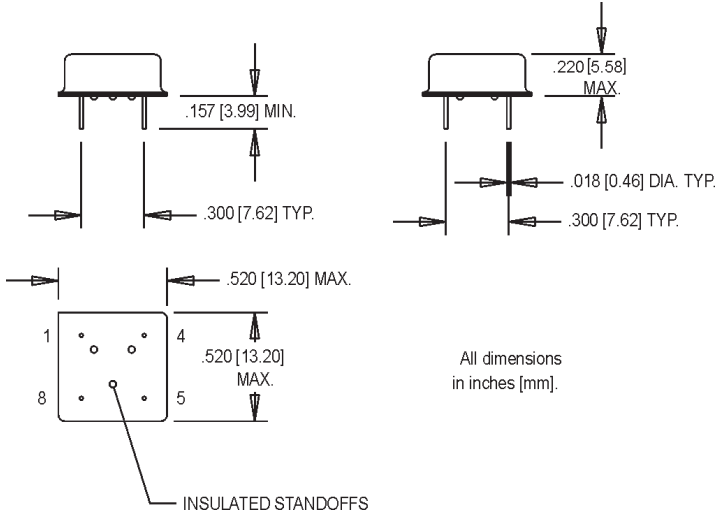


# K500 Series

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

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition	
Electrical Specifications	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						
					8	ns	TTL	
					10	ns	CMOS	
					6	ns	TTL	
	Environmental	Fanout			8	ns	CMOS	
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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