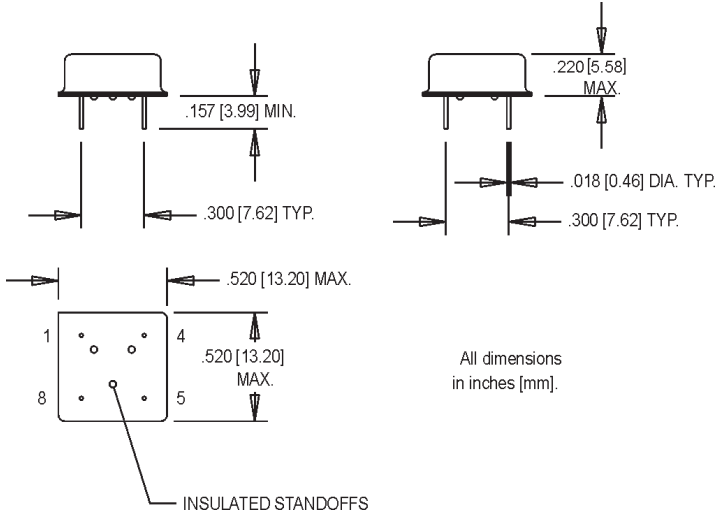


K500 Series

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



THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS.



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 _A	-40		+85	°C		
	Storage Temperature	T _S	-55		+125	°C		
	Input Voltage	V _{dd}	4.5	5.0	5.5	V		
	Input Current	I _{dd}			15	mA	<20 MHz	
					50	mA	20 - 70 Mhz	
	Symmetry (Duty Cycle)		40		60	%	@ 1.4V TTL/0.5V _{cc} 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		
Start up Time				10	ms			
Environmental	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 ⁻⁸ 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.

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