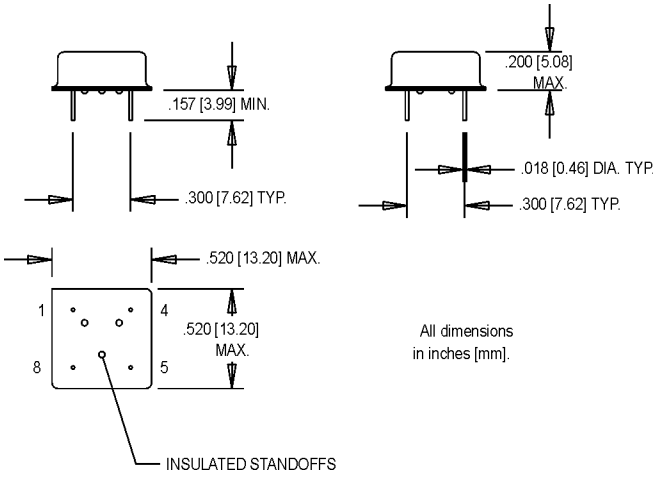
K500 Series

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



All dimensions in inches [mm].

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	ΔF/F	(See Ordering Information)				See Note 1
	Operating Temperature	TA	-40		+85	°C	
	Storage Temperature	Ts	-55		+125	°C	
	Input Voltage	Vdd	4.5	5.0	5.5	V	
	Input Current	Idd			15	mA	<20 MHz
					50	mA	20 - 70 Mhz
	Symmetry (Duty Cycle)		40		60	%	@ 1.4V TTL/0.5Vcc 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-toAir; 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	