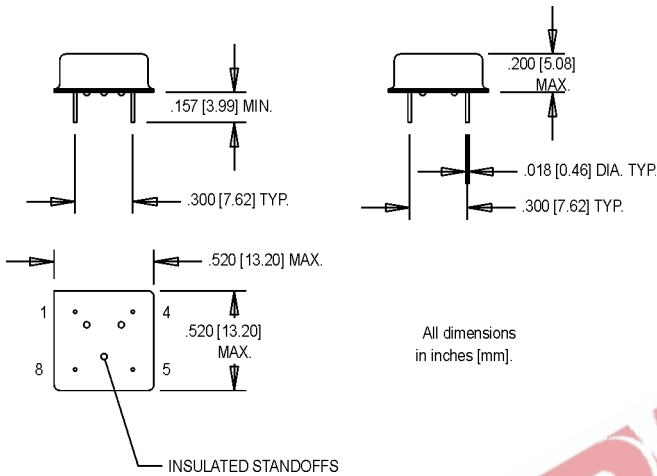


K500 Series

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



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 | |
|-------------------------|--|----------------------------|------|------|--|------------------------------------|------------|
| 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 | T _r /T _f | | | | | | |
| <20 MHz | | | | 8 | ns | TTL | |
| | | | | 10 | ns | CMOS | |
| >20 Mhz | | | | 6 | ns | TTL | |
| | | | | 8 | ns | CMOS | |
| Fanout | | | | 10 | | TTL | |
| 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 ⁻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 | | |

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