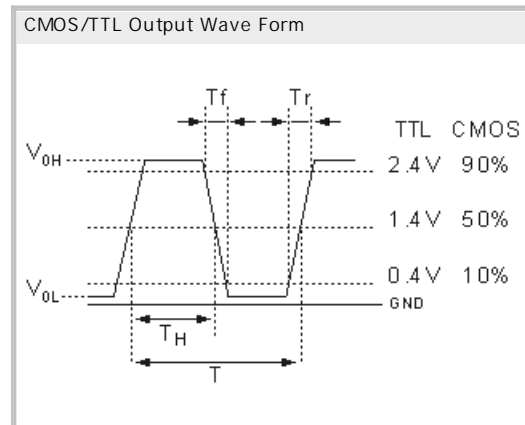
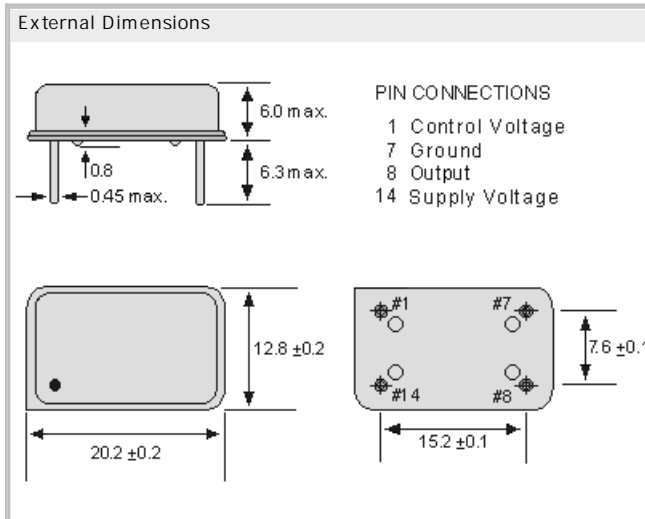


VCXO-12T5.0 DIL 14 5.0V  
Voltage Controlled Crystal Oscillator

- Output Wave Form CMOS/TTL
- packed in antistatic tubes
- RoHS conform; Lead-free product
- Vibration: MIL-STD-202F method 204, 35G, 50 to 2000 Hz
- Shock: MIL-STD-202F method 213B, test cond. E, 1000GG 1/2 sine wave
- Available in many standard and special frequencies



## Specifications - Product No. G005000000BGSUPC00AA

|   |  |
|---|--|
| Holder Type:                            | VCXO-12T5.0 5.0V (Voltage code is " 5.0 " )  |
| Frequency:                              | 5.000000 MHz   |
| Initial Freq. Accuracy (at 25 °C):      | To tune to the nominal frequency with Vc = 2.5V ± 0.2V   |
| Frequency Stability at 25°C:            | ± 25.0 ppm   |
| Storage Temperature:                    | -50°C to +105°C  |
| Current Consumption:                    | 20 mA typical, 45 mA max.  |
| Frequency Deviation:                    | ± 100 ppm  |
| Operating Temperature Range:            | ± 25.0 ppm over -20°C to +70°C (inclusive of 25°C tolerance, ± 10% input voltage variation, load change, aging, shock and vibration )                                |
| Power Supply Voltage (Vdd):             | + 5.0V DC ± 10%  |
| Maximum Supply Current:                 | 35.0 mA  |
| Output Load CL:                         | 2 TTL gates max. / CMOS 15 pF  |
| Output "1" Level (VOH)/"0" Level (VOL): | 2.4V (min.) TTL / 4.5V (min.) CMOS // 0.4V (max.) TTL / 0.5V(max.) CMOS  |
| Output Symmetry (Duty Cycle):           | 40/60%   |
| Modulation Bandwidth (at -3 dB):        | 10KHz min, Vcontrol at 1.65V or at 2.5V  |
| Voltage Control:                        | 2.5V DC Center / 0.5V to 4.5V Range  |
| Linearity:                              | 6% typical; 10% max.   |
| Rise/Fall Time TTL:                     | 6ns (max.) 4ns (typ.) Measured between 0.4V and 2.4V   |
| Rise/Fall Time CMOS:                    | 6ns (max.) 4ns (typ.) Measured between 20% and 80% Vdd of the wave form (CL = 15pF)  |
| Integrated Phase Jitter:                | 1 ps max. (12 kHz to 20 MHz)   |
| Period Jitter:                          | RMS 2.0 ps (typ.) / Peak to Peak 14 ps max.  |
| Phase Noise (27MHz at 3.3V):            | -40dBc/Hz at 10Hz offset -147dBc/Hz at 10kHz offset<br>-104dBc/Hz at 100Hz offset -152dBc/Hz at 100kHz offset<br>-132dBc/Hz at 1kHz offset -150dBc/Hz at 1MHz offset |
| Start Up Time:                          | 10 ms (max.), 5ms (typ.)   |
| Aging:                                  | ± 3 ppm per year (max.)  |
| Input Impedance:                        | 1 M Ohm typical  |
| Reflow Condition:                       | 10 sec. max. at 260°C  |

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