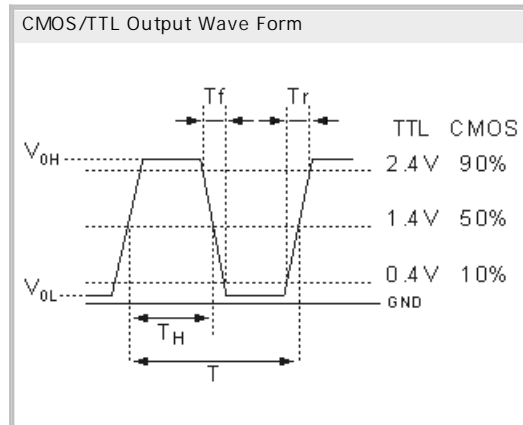
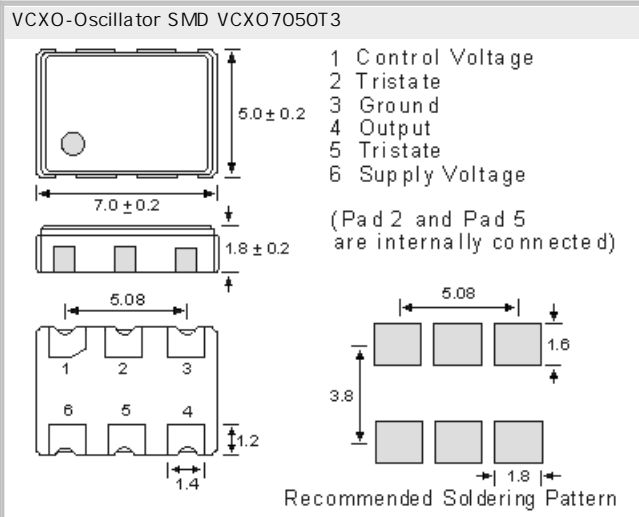




VCXO-Oscillator SMD VCXO7050T3-6pad, 3.3V Voltage Controlled Crystal Oscillator

- CMOS/TTL Output Wave Form
- SMD in ceramic case (7.0 x 5.0 x 1.8) mm, on Tape & Reel (Tape 16mm)
- with Tri-State Function, 3.3 V
- 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

|  |   |
|--|---|
| Holder Type:                             | VCXO-Oscillator SMD VCXO7050T3-6pad 3.3V (Voltage code is "3.3")  |
| Frequency:                               | 27.000000 MHz   |
| Initial Freq. Accuracy (at 25 °C):       | To tune to the nominal frequency with $V_c = 1.65V \pm 0.2V$  |
| Freq. Stability o.Operating Temp. Range: | $\pm 25.0$ ppm  |
| Operating Temperature Range:             | $\pm 25.0$ ppm over $-20^\circ C$ to $+70^\circ C$ (inclusive of $25^\circ C$ tolerance, $\pm 10\%$ input voltage variation, load change, aging, shock and vibration) |
| Deviation:                               | Frequency Range $\pm 100$ ppm   |
| Power Supply Voltage (Vdd):              | + 3.3V DC $\pm 10\%$  |
| Maximum Supply Current:                  | 20.0 mA   |
| Output Load CL:                          | 2 TTL gates max. / CMOS 15 pF   |
| Output "1" Level (VOH):                  | 2.4V (min.) TTL / 2.97V (min.) CMOS   |
| Output "0" Level (VOL):                  | 0.4V (max.) TTL / 0.33V (max.) CMOS   |
| Output Symmetry (Duty Cycle):            | 40/60%  |
| Tri-State Function:                      | Tri-State Enable High. No connection or $V_{dd} - 0.5V_{min}$ is applied to a Tri-state pin to enable output. Ground + 0.5Vmax. to disable output (high impedance).   |
| Modulation Bandwidth (at -3 dB):         | 10KHz min, $V_{control}$ at 1.65V or at 2.5V  |
| Voltage Control:                         | 1.65V DC Center / 0.3V to 3.0V 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% $V_{dd}$ of the wave form (CL = 15pF)  |
| Integrated Phase Jitter:                 | 1 ps max. (12 kHz to 20 MHz)  |
| 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:                                   | $\pm 3$ ppm per year (max.)   |
| Input Impedance:                         | 1 M Ohm typical   |
| Reflow Condition:                        | 10 sec. max. at $260^\circ C$   |

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