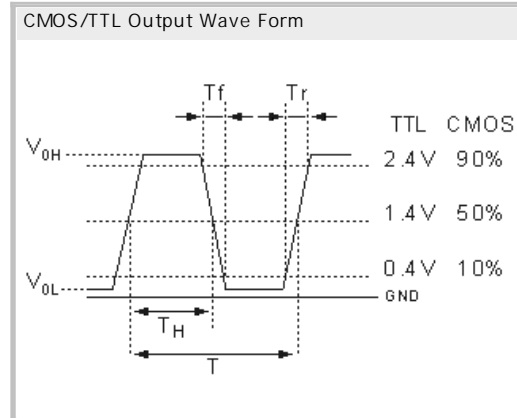
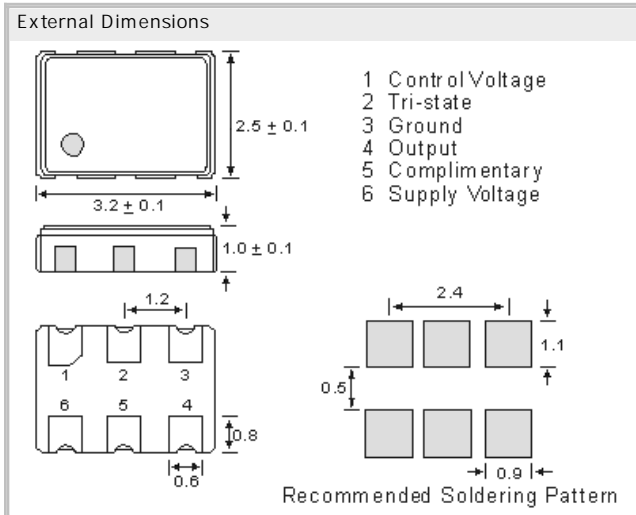


VCXO-Oscillator SMD VCXO3225T3-6pad 3.3V Voltage Controlled Crystal Oscillator

- Output Wave Form CMOS/TTL
- SMD in ceramic case (3.2 x 2.5 x 1.0) mm
- 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:	VCXO3225T3.3-6pad Tristate 3.3V (Voltage code is "3.3")
Frequency Range:	1.0 MHz to 50.0 MHz ( Fun. frequency crystal used )
Initial Freq. Accuracy (at 25 °C):	To tune to the nominal frequency with $V_c = 1.65V \pm 0.2V$
Frequency Stability at 25°C/Deviation:	$\pm 25ppm$ (typ.) , $\pm 50ppm$ , $\pm 100ppm$ / $\pm 100ppm$ (typ.) , $\pm 150ppm$
Operating Temperature Range:	-10°C to +70°C / -40°C to 85°C, Storage Temp. -50°C to +105°C
Power Supply Voltage (Vdd):	+ 3.3V DC $\pm$ 10%
Maximum Supply Current:	20 mA max.
Output Load:	2 TTL gates max. / CMOS 15pF (typ.)
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% (45/55% optional)
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 + 0.5V max. 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 -104dBc/Hz at 100Hz offset -152dBc/Hz at 100kHz offset -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°C

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