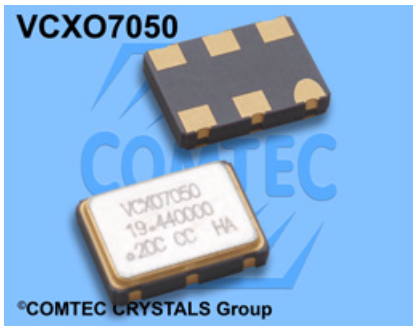
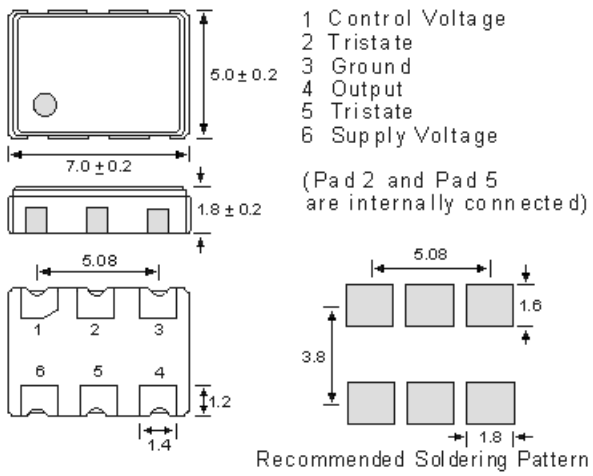
COMTEC CRYSTALS Group Data Sheet



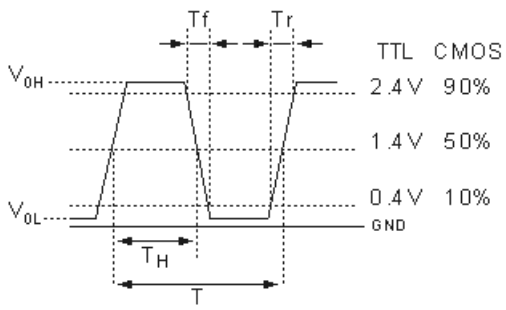
VCXO-Oscillator SMD VCXO7050T3-6pad, 3.3V
Voltage Controlled Crystal Oscillator

- 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

VCXO-Oscillator SMD VCXO7050T3



CMOS/TTL Output Wave Form



Specifications - Product No. G032000000CHSUPC00AA

Holder Type:	VCXO-Oscillator SMD VCXO7050T3.3-6pad 3.3V (Voltage code is "3.3")
Frequency:	32.000000 MHz
Initial Freq. Accuracy (at 25 °C):	To tune to the nominal frequency with Vc = 1.65V ±0.2V
Freq. Stability o.Operating Temp. Range:	± 25.0 ppm
Operating Temperature Range:	± 25.0 ppm over -20°C to +70°C (incusive of 25°C tolerance, ± 10% input voltage variation, load change, aging, shock and vibration)
Deviation:	Frequency Range ±100ppm
Power Supply Voltage (Vdd):	+3.3V DC ± 10%
Maximum Supply Current:	20.0 mA
Output Load CL:	2 TTL gates max. / CMOS 15 pF
Output "1" Level (V0H):	2.4V (min.) TTL / 2.97V (min.) CMOS
Output "0" Level (V0L):	0.4V (max.) TTL / 0.33V (max.) CMOS
Output Symmetry (Duty Cycle):	40/60%
Tri-State Function:	Tri-State Enable High. No connection or Vdd- 0.5Vmin.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, Vcontrol 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% Vdd 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:	±3 ppm per year (max.)
Input Impedance:	1 M Ohm typical
Reflow Condition:	10 sec. max. at 260°C

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