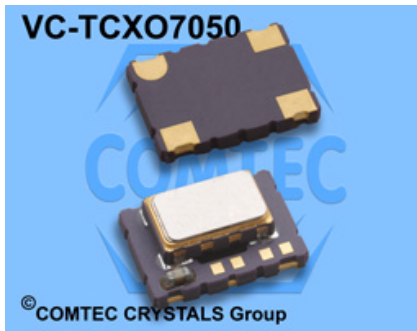


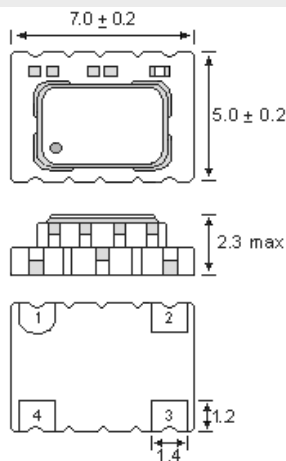
## VC-TCXO7050



VC-TCXO-Oscillator SMD VC-TCXO7050TB2.8  
2.8V LVC MOS

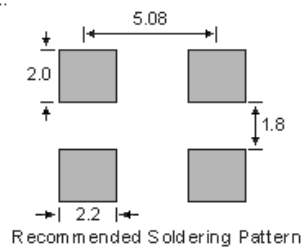
- Voltage Control Temperature Compensated Crystal Oscillator
- SMD in ceramic case (7.0 x 5.0 x 2.3) mm
- LVC MOS Square Wave Output; Wave form code is " T "
- Low Jitter, Peak-to-peak period jitter is 70 ps (typical)
- RoHS conform; Lead-free product; Tape & Reel
- Vibration: MIL-STD-202F method 204, 35G, 50 to 2000 Hz
- Shock: MIL-STD-202F method 213B, test cond. E, 1000G 1/2 sine wave

### External Dimensions

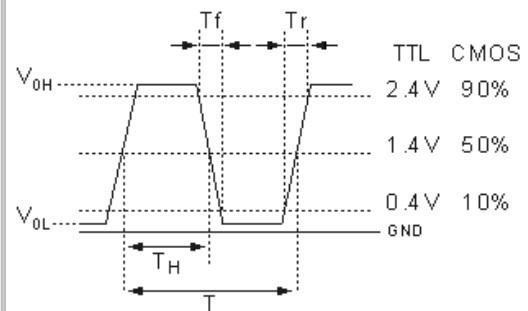


### Pad Connections:

- Pad 1 Voltage control for VC TCXO  
No connection for TCXO
- Pad 2 Ground
- Pad 3 Output
- Pad 4 Supply voltage



### CMOS/TTL Output Wave Form



## Specifications

Holder Type:	VC-TCXO7050TB2.8 2.8V (Voltage code is " 2.8 " )
Frequency Range:	1.00 MHz to 200.0 MHz
Input Voltage:	+ 2.8V <sub>dd</sub> ± 5%
Frequency Stability:	± 0.5ppm to ± 3.0ppm
Freq. Stability vs Temperature:	0° to 50°C (± 0.5ppm) to -40 to + 85°C ( ± 1.0 to ± 3.0ppm)
Freq. Stability vs Aging:	± 1.0 ppm, first year at 25°C
Freq. Stability vs Voltage Change:	± 0.3 ppm, for a ± 5% input voltage change
Freq. Stability vs Load Change:	± 0.3 ppm, for a ± 10% load condition change
Current Consumption:	8.0 mA (25MHz at + 25°C); 20mA max(200MHz at + 25°C)
Output Load:	15pF
Output Logic Levels:	Logic High "1" : 90% V <sub>dd</sub> min. Logic Low "1" : 10% V <sub>dd</sub> min.
Pin 1 Options VCTCXO only:	Control Voltage: Standard + 1.5V ± 1.0V for all input voltages. Slope Polarity: Positive slope. Positive voltage for positive frequency shift. Input Impedance: 50kOhm min.; Linearity ± 10% max. Modulation Bandwidth (at-3 dB) : 20kHz min.
Output Symmetry (Duty Cycle):	40/60% normal, 45/55% tight at 50%
Rise/Fall Time CMOS:	10.0ns max. Measured between 20% and 80% V <sub>dd</sub>
Start Up Time:	5.0 ms (typ.), 10.0 ms (max.)
Phase Noise (133.333MHz):	-76dBc/Hz at 10Hz , -102dBc/Hz at 100Hz, -114dBc/Hz at 1kHz , -110dBc/Hz at 10kHz, -100dBc/Hz at 10kHz
Storage Temperature:	-40+ 85°C or -55 to + 125°C (package dependent)
Reflow Condition:	260°C max. for 10 sec.

### GERMANY:

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