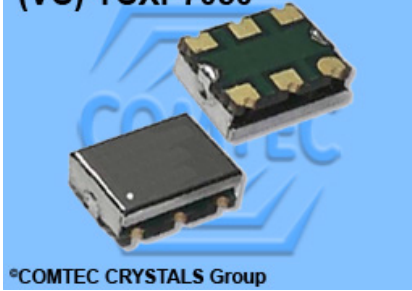




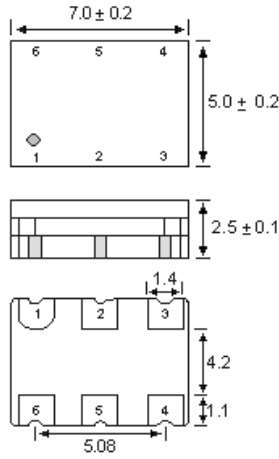
## (VC)-TCXP7050



Voltage Control Temp. Comp. Crystal Oscill. VCTCX(O)P  
Type VCTCXO(P)7050PQN3.3 LVPECL 3.3V, Jitter 0.8pS

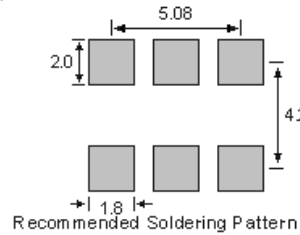
- SMD in ceramic case (7.0 x 5.0 x 2.5) mm
- Tri-State Enable / Disable
- LVPECL Differential
- on Tape & Reel
- RoHS conform: Lead-free product
- Vibration: MIL-STD-202F method 204, 35G, 50 to 2000 Hz
- Shock: MIL-STD-202F method 213B, test cond. E, 1000GG 1/2 sine wave
- Available in many standard and special frequencies

## (VC)-TCXO(P)7050PQN3.3 LVPECL

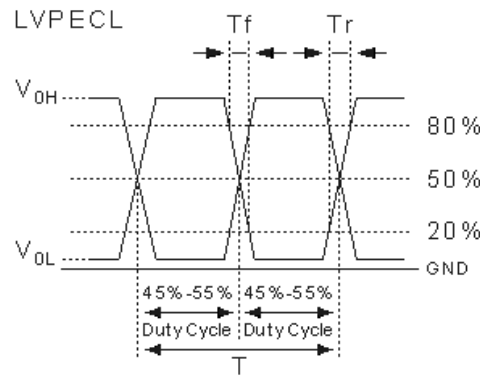


### Pad Connections:

- Pad 1 Voltage control for VCTCXO  
No connection for TCXO
- Pad 2 Tri-state
- Pad 3 Ground
- Pad 4 Output
- Pad 5 CMOS --- No connection
- Pad 6 Supply voltage



### LVPECL Square Wave Output Wave Form



## Specifications

Holder Type:	Voltage Control Temperature Compensated Crystal Oscillator , Type VCTCX(O)P7050PQN3.3 LVPECL 3.3V
Frequency Range:	10.0 MHz ~ 1.450 MHz
Initial Calibration Tolerance:	± 1.0 ppm max. at 25°C ± 2°C
Frequency Stability Codes ( FSC):	
( FSC) Temperature (ref to +25°C):	± 0.5 ppm; ± 2.5 ppm over -30+ 85°C; ± 1.0 ppm over -40+ 85°C (Inclusive Operating Temp., Supply Voltage, & Load)
( FSC) Aging:	± 1.0 ppm max. / year (max.)
( FSC) Voltage Change:	± 0.2 ppm max. , for a ±5% input voltage change.
( FSC) Load Change:	± 0.2 ppm max. , for a ±10% load condition change.
Power Supply Voltage (Vdd):	+ 3.3V D.C. ± 5% ( voltage code " 3.3 " )
Output Symmetry (Duty Cycle):	45/55%
Start Up Time:	5 ms max.
Storage Temperature:	-55°C to +150°C
Maximum Supply Current:	156MHz : 25 mA ; 600MHz : 30 mA ; 800MHz : 32 mA; 1 GHz : 36 mA
Current with Output Disabled:	18 mA ( typical )
SSB Phase Noise (Frequency 212.5 MHz):	-42dBc/Hz @ 10Hz, -87dBc/Hz @ 100Hz, -105dBc/Hz @ 1kHz -115dBc/Hz @ 10kHz, -118dBc/Hz @ 100kHz, -130dBc/Hz @ 1MHz, -151dBc/Hz @ 10MHz
Output Logic (VOH) (VOL):	1.4V typical, 1.6V max./ 1.1V typical, 0.9V min.
Control Voltage Function (CVF) Pad 1:	
(CVF) Linearity: ±1% typical ±10% max:	(CVF) Absolute Voltage: 4.0V max. // (CVF) Center+ Range: +1.5V ± 1.0V
(CVF) Transfer Function: Positive Transfer	(CVF) Input Impedance: 770 K typical // (CVF) Harmonics: -5.0 dBc max.
(CVF) Frequency Pulling Range:	± 8ppm min.
Output Enable Funktion (OEF) Pad 2:	Output Enable Time/ Disable Time: 200nS max. / 50nS max.
(OEF) Integrated Phase Jitter:	0.8 pS typical ( 12 KHz to 20 MHz ) ; < 150 fS ( 1.875 KHz to 21 MHz )
Rise/Fall Time (20% to 80% Vdd):	0.2 ns typical < 0.4 ns max. ; Tr/Tf: 20% <-> 80% wave form
See also ....:	<a href="http://www.comtec-crystals.com/docs/G/GMX2.htm">http://www.comtec-crystals.com/docs/G/GMX2.htm</a>

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