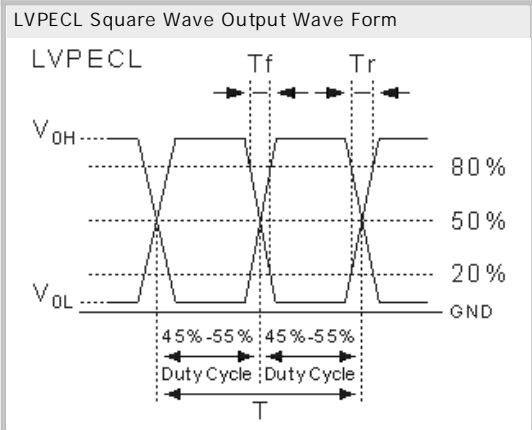
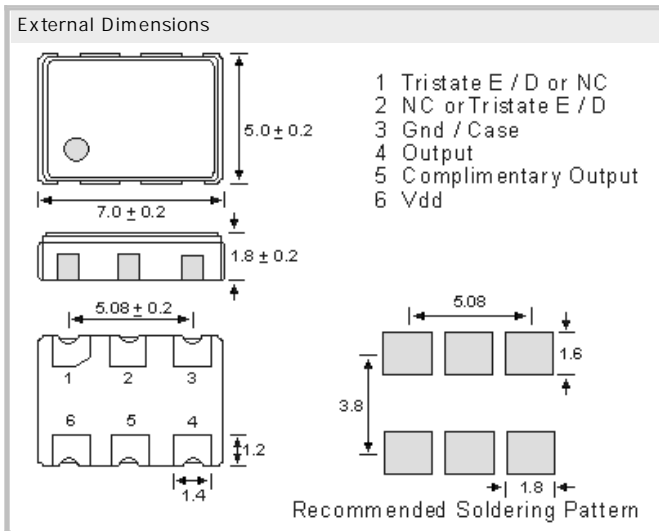


Differential LVPECL Clock Oscillator  
CXO7050PK2.5, 2.5V, 200 fsec Jitter

- SMD in ceramic case (7.0 x 5.0 x 1.8) mm
- Tri-State Enable / Disable on pad No. 1
- Femto second integrated phase jitter (200 fs typical, 12 KHz to 20 MHz)
- Superior phase noise (-138 dBc/Hz at 10 KHz and -144 dBc/Hz at 100 KHz offset)
- RoHS conform; Lead-free product; on Tape (16mm) & Reel
- 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
- High performance with surprisingly low price



## Specifications

Holder Type:	CXO7050PK2.5; 2.5V(Voltage code is "2.5"); Tri-State on pad 1
Frequency:	125.000000 MHz
Frequency Stability at 25°C:	± 100 ppm
Operating Temperature Range:	± 100 ppm over -10°C to +70°C (inclusive of 25°C tolerance, ±10% input voltage variation, load change, aging, shock and vibration)
Storage Temperature:	-55°C to +150°C
Power Supply Voltage (Vdd):	+ 2.5V D.C. ± 5%
Maximum Supply Current (15pF load):	30.0 mA typ.
Output Swing:	595 mV min; 750 mV typical; 930 mV max.
Output Logic Levels:	High "1" $V_{OH}$ $V_{dd}-1.025V$ min., $V_{dd}-0.95V$ typical; $V_{dd}-0.88V$ max. Condition: $R_L= 50\text{ Ohm}$ to ( $V_{dd}-2.0V$ ) Low "0" $V_{OL}$ $V_{dd}-1.810V$ min., $V_{dd}-1.70V$ typical; $V_{dd}-1.62V$ max. Condition: $R_L= 50\text{ Ohm}$ to ( $V_{dd}-2.0V$ )
Output Symmetry (Duty Cycle):	50% ± 5% max. measured at 50% waveform
Load:	$R_L= 50\text{ Ohm}$ into ( $V_{dd}-2.0V$ ) or Thevenin equivalent (terminating resistors required on all outputs).
Rise/Fall Time:	0.3ns typical, 0.5ns max. @ 20% to 80% of PECL wave form
Start Up Time:	3 ms typical; 10 ms max.
Tri-state Function Pin 1 (or 2):	If no connection or $V_{dd} * 70\%$ min is applied: Output. Internal pull-up Oscillation disable time is 2ms max. If $V_{dd} * 30\%$ max is applied: High impedance. 10µA typ., enable time 2ms max.
Phase Jitter (12 kHz to 20 MHz):	200 fs typical
Phase Noise (125 MHz):	-50dBc/Hz @ 10Hz, -82dBc/Hz @ 100Hz, -116dBc/Hz @ 1kHz -138dBc/Hz @ 10kHz, -144dBc/Hz @ 100kHz, -149dBc/Hz @ 1MHz
Aging:	< ± 3ppm max. for the first year
Reflow Condition:	260°C max for 10 sec.

### GERMANY:

COMTEC CRYSTALS GmbH · Sultenstrasse 12-14  
8 5 5 8 6 P o i n g / G E R M A N Y  
Phone +49 8121 778160 · Fax +49 8121 778177  
e-Mail [info@comtec-crystals.com](mailto:info@comtec-crystals.com)  
Internet: <http://www.comtec-crystals.com>  
Subject to change without prior notice.



Technical Data and Graphics are all under  
Copyright (c) of Comtec Crystals Group.

### FRANCE:

COMTEC CRYSTALS SARL · 23, rue du Faucon  
6 7 5 0 0 H a g u e n a u / F R A N C E  
Phone +33 388 732162 · Fax +33 388 730118  
e-Mail [sales@comtec-crystals.com](mailto:sales@comtec-crystals.com)  
Internet: <http://www.comtec-crystals.com>  
s o u s r é s e r v e d e m o d i f i c a t i o n s .