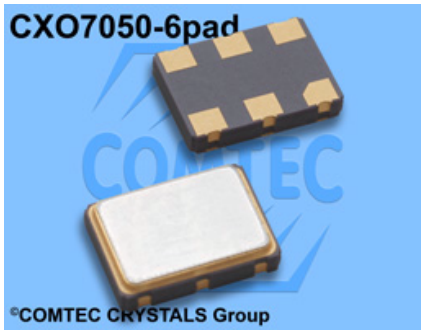
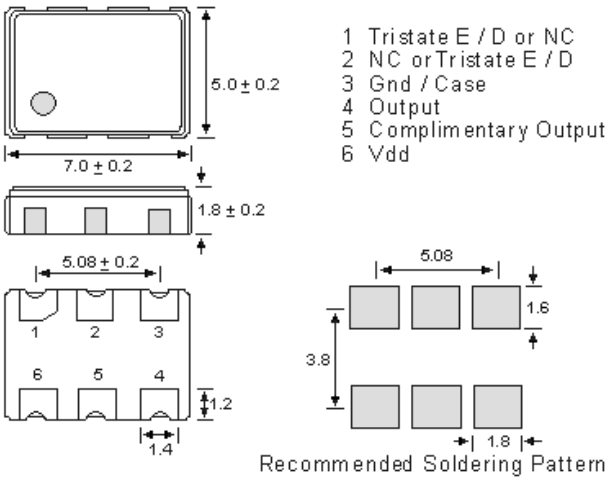



Differential LVDS Clock Oscillator
CXO7050DK2.5, 2.5V, 300 fsec Jitter

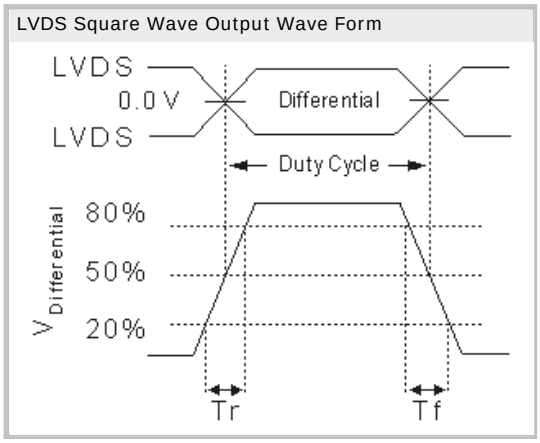
- SMD in ceramic case (7.0 x 5.0 x 1.8) mm
- Tri-State Enable / Disable on pad No. 1
- Femto second integrated phase jitter (300 fs typical, 12 KHz to 20 MHz)
- Superior phase noise (-138 dBc/Hz at 10 KHz and -142 dBc/Hz at 100 KHz offset)
- RoHS conform; Lead-free product; on Tape (16mm) & Reel
- Vibration: 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

Differential LVDS Clock Oscillator CXO7050DK2.5





LVDS Square Wave Output Wave Form




## Specifications

| | |
|---|---|
| Holder Type: | Differential LVDS Clock Oscillator CXO7050DK2.5;2.5V; Tri-State on pad 1 |
| Frequency: | 200.000000 MHz |
| Frequency Stability at 25°C: | ± 50.0 ppm |
| Operating Temperature Range: | ± 50.0 ppm over -40°C to +85°C (incusive 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): | 16.0 mA |
| Output Swing: | 250 mV min; 350 mV typical; 450 mV max. RL=100Ohm |
| Output Logic Levels: | High "1" 1.43V typical; 1.6V max, RL=100 ohms.; Low "0" 0.9V min; 1.1V typical, RL=100 ohms |
| Output Symmetry (Duty Cycle): | 50% ± 5%max. measured at 50% waveform |
| Load: | RL=100 ohms between output and complimentary output |
| Rise/Fall Time: | Tr = 0.2 ns. typ; 0.4 ns. max. 20% -> 80% of waveform<br>Tf = 0.2 ns. typ; 0.4 ns. max. 80% -> 20% of waveform |
| Start Up Time: | 3 ms typical; 10 ms max. |
| Tri-state Function Pin 1: | If no connection or Vdd *70% min is applied: Output. Internal pull-up<br>Oscillation disable time is 2µs max.<br>If Vdd*30% max is applied: High impedance. 10µA typ., enable time 2ms max. |
| Phase Jitter (12 kHz to 20 MHz): | 300 fs typical |
| Phase Noise (125 MHz): | -60dBc/Hz @ 10Hz, -90dBc/Hz @ 100Hz, -120dBc/Hz @ 1kHz<br>-136dBc/Hz @ 10kHz, -142dBc/Hz @ 100kHz, -145dBc/Hz @ 1MHz,<br>-148dBc/Hz @ 10MHz |
| Aging: | < ±3ppm max. for the first year |
| Reflow Condition: | 260°C max for 10 sec. |

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