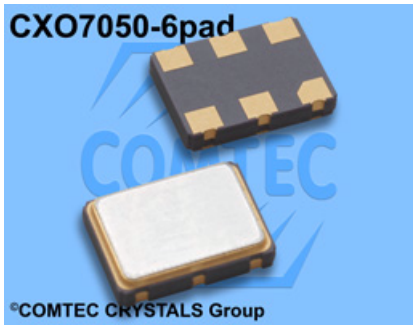
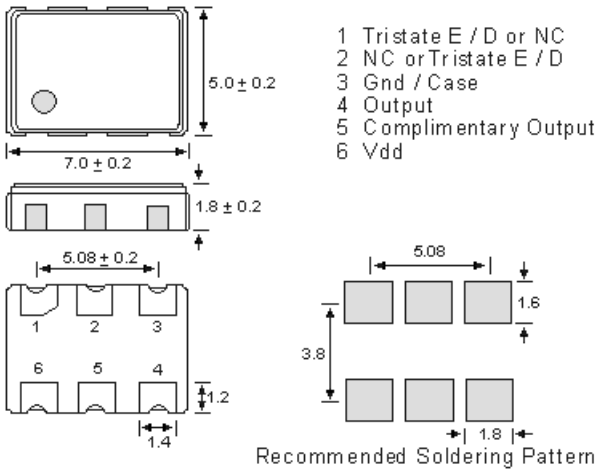


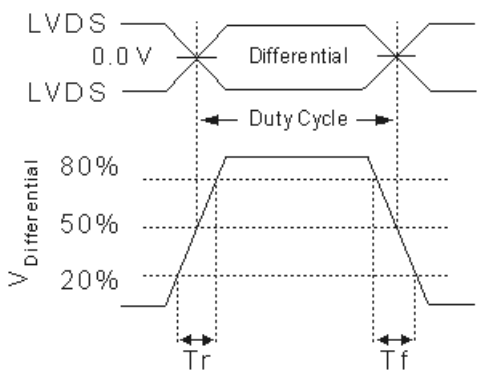

Clock Oscillator LVDS Differential CXO7050DF2.5-1/2, 2.5V

- SMD in ceramic case (7.0 x 5.0 x 1.8) mm
- Tri-State Enable / Disable on pad No. 1 or 2
- LVDS Square Wave Output Wave Form
- High Q fundamental crystal + low jitter multiplier circuit + ultra low jitter multiplier circuit
- 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
- Available in many standard and special frequencies

External Dimensions




LVDS Square Wave Output Wave Form




## Specifications

| | |
|---|---|
| Holder Type: | CXO7050DF2.5-1/2; 2.5V(Voltage code is "2.5"); Tri-State on pad 1 or 2 |
| Frequency: | 200.000000 MHz |
| Frequency Stability at 25°C: | ± 50.0 ppm |
| Operating Temperature Range: | ± 50.0 ppm ; -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): | 80.0 mA max. |
| Output Logic Levels: | High "1" Voh 1.4V typical; 1.6 V max.<br>Low "0" VoL 1.1V typical; 0.9 V min. |
| Differential Output: | Voltage, Vod: 247mV min; 355mV typical; 454mV max. Output1 - output 2<br>Error, dVod : -50mV min; 50mV max. |
| Offset Magnitude Error, (dVos): | 0mV min.; 3mV typical; 25mV max. |
| Output Offset Voltage, (Vos): | 1.125V min.; 1.200V typical; 1.375 V max. |
| Output Symmetry (Duty Cycle): | 50% ± 5%max.; Measured at 1.25V |
| Load: | RL=50 Ohm from each output |
| Rise/Fall Time: | 0.7ns typical, 1.0ns max. @ 20% to 80% of LVDS wave form |
| Start Up Time: | 5 ms typical; 10ms max. |
| Tri-state Function Pin 1 (or 2): | When Pin 1 (or 2) = 1, Output Enable<br>When Pin 1 (or 2) (at 0.0V), Output High impedance, Disable current: 50µA max. |
| Phase Jitter (12 kHz to 20 MHz): | 0.4 ps typ., 0.5 ps max., for 156.250MHz |
| Period Jitter, RMS, peak to peak: | (decoupling capacitor between Vdd and GND) for 156.250 MHz<br>RMS: 3ps typ., 5ps max; peak to peak: 20ps typ; 30ps max. |
| Phase Noise (156.250 MHz): | -62dBc/Hz @ 10Hz, -92dBc/Hz @ 100Hz, -120dBc/Hz @ 1kHz<br>-132dBc/Hz @ 10kHz, -130dBc/Hz @ 100kHz, -140dBc/Hz @ 1MHz |
| Aging: | < ±3ppm max. for the first year; ±2ppm max. per year therafter |
| Reflow Condition: | 260°C max for 10 sec. |

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