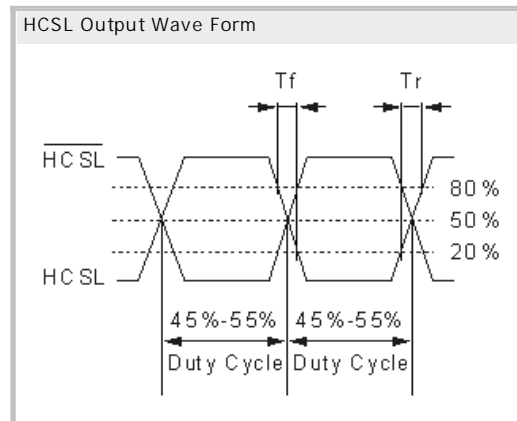
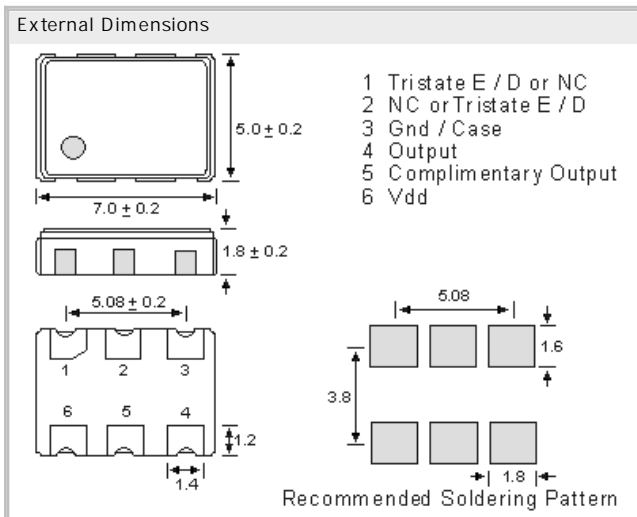


Differential HCSL Clock Oscillator  
CXO7050CK 3.3, 3.3V, 200 fsec Jitter

- 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, 1000G 1/2 sine wave
- High performance with surprisingly low price



## Specifications

Holder Type:	CXO7050CK3.3; 3.3V(Voltage code is "3.3"); Tri-State on pad 1
Frequency Range:	13.500 MHz ~ 220.000 MHz
Frequency Stability at 25°C:	±20 to ±100 ppm
Operating Temperature Range:	-20°C to +70°C, -40°C to +85°C, (100ppm) -40°C to +105°C (Inclusive of 25°C tolerance, operating Temp., Supply Voltage, & Load, aging, shock and vibration)
Storage Temperature:	-55°C to +150°C
Power Supply Voltage (Vdd):	+ 3.3V D.C. ± 5%
Maximum Supply Current (15pF load):	< 90MHz: 17mA typ. 27mA max.; 90.1MHz: ~160MHz: 25mA max.; 160.1MHz~220MHz: 30mA max.;
Output Swing:	620 mV min; 700 mV typical; 780 mV max.
Output Logic Levels:	High "1" Voh 660 mV min.; 740 mV typical; 850 mV max. Low "0" Vol -150 mV min.; 0 mV typical; 150 mV max.
Output Symmetry (Duty Cycle):	50% ± 5% max. measured at Q and complimentary Q cross point
Load:	RL= 50 to ground on each output
Rise/Fall Time:	0.15 ns. typ; 0.4 ns. max. 20% -> 80% of HCSL waveform/(RL = 100 , CL = 10pF)
Start Up Time:	3 ms typical; 10 ms max.
Tri-state Function Pin 1:	If not connected or 2.4V min. (referenced to ground) is applied: Output. Internal pull-up. Oscillation disable time is 0.2 µs max. If 0.6V max. is applied: High impedance. Current consumption is 10 µA max. Oscillation enable time is 2ms. max.
Phase Jitter (12 kHz to 20 MHz):	200 fs typical for 155.52 MHz
Phase Noise (125 MHz):	-50dBc/Hz @ 10Hz, -82dBc/Hz @ 100Hz, -116dBc/Hz @ 1kHz -138dBc/Hz @ 10kHz, -144dBc/Hz @ 100kHz, -149dBc/Hz @ 1MHz, -155dBc/Hz @ 10MHz
Aging:	< ±3ppm max. for the first year
Reflow Condition:	260°C max for 10 sec.

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