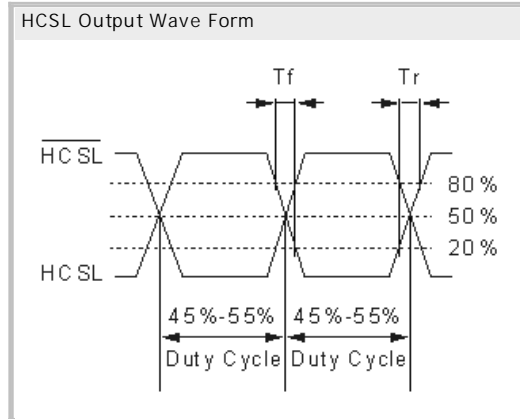
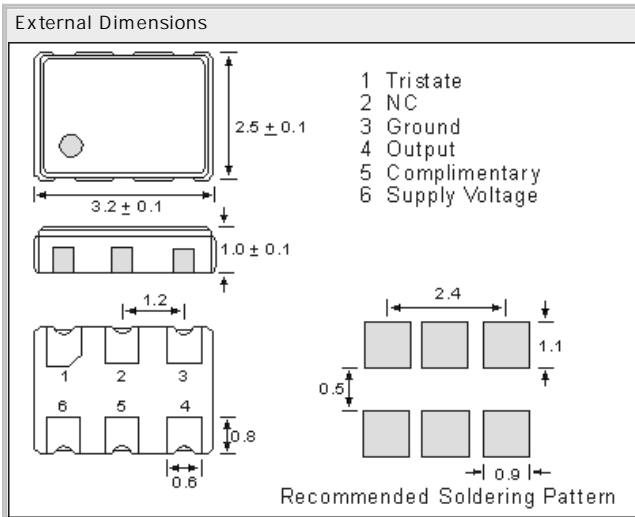


Differential HCSL Clock Oscillator, non PLL  
CXO3225CK2.5, 2.5V, Jitter 0.2 ps (typical)

- SMD in ceramic case (3.2 x 2.5 x 1.0) 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:	CXO3225CK2.5; 2.5V(Voltage code is "2.5"); Tri-State on pad 1
Frequency Range:	13.500 MHz ~ 200.000 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):	+ 2.5V 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 Ohm 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.
OE Function:	-Enable: When 70% min. of VDD to Enable Output. Enable time: 10ms -Disable: When 30% max. of VDD to Disable Output. Disable current : 10 µA, Disable time : 0,2 µs (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.

### 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>  
sous réserve de modifications.