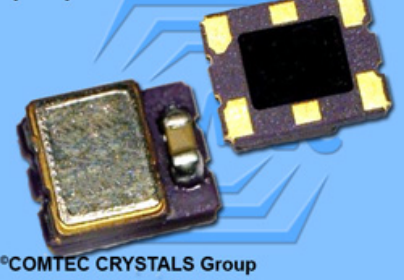




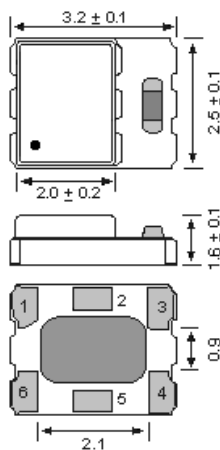
## (VC)TCXP3225



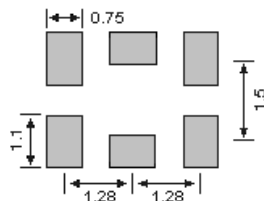
(VC)-Temperature Compensated Crystal Oscillator  
(VC)-TCXP3225DQF3.3 LVDS 3.3V 1.2pS Phase Jitter

- SMD in ceramic case (3.2 x 2.5 x 1.6) mm
- Tri-State Enable / Disable
- LVDS Differential
- on Tape & Reel
- RoHS conform; Lead-free product
- 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

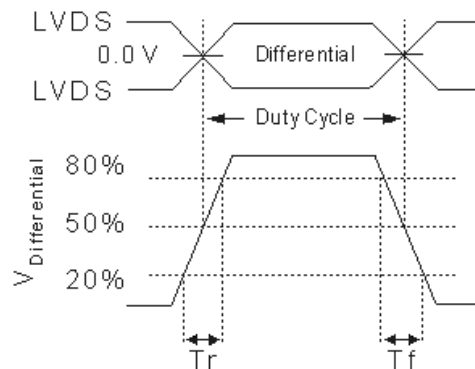
## (VC)-TCXP3225DQF3.3 LVDS



- 1 No connection for TCXO Voltage control for VCTCXO
- 2 Output enable
- 3 Ground
- 4 CMOS: Output LVPECL / LVDS: Differential
- 5 CMOS: No connection LVPECL / LVDS: Complementary
- 6 Supply Voltage



## LVDS Square Wave Output Wave Form



## Specifications - Product No. G245760000RCWUPN10MB

Holder Type:	Voltage Control Temperature Compensated Crystal Oscillator , Type (VC)-TCXP3225DQF3.3 LVDS 3.3V
Frequency:	245.760000 MHz
Frequency Stability at 25°C:	± 1.0 ppm
Operating Temperature Range:	± 2.5 ppm over ±0°C to +70°C (inclusive of 25°C tolerance, ± 10% input voltage variation, load change, aging, shock and vibration )
Frequency Stability Codes ( FSC):	
( FSC) Aging:	± 1.0 ppm max. / year (max.)
( FSC) Voltage Change:	± 0.2 ppm max. , for a ± 5% input voltage change.
( FSC) Load Change:	± 0.2 ppm max. , for a ± 10% load condition change.
Power Supply Voltage (Vdd):	+ 3.3V D.C. ± 5% ( voltage code " 3.3 " )
Output Symmetry (Duty Cycle):	45/55%
Start Up Time:	5 ms max.
Storage Temperature:	-55°C to +150°C
Maximum Supply Current:	
Current with Output Disabled:	18 mA ( typical )
SSB Phase Noise (Frequency 212.5 MHz):	-42dBc/Hz @ 10Hz, -87dBc/Hz @ 100Hz, -105dBc/Hz @ 1kHz -115dBc/Hz @ 10kHz, -118dBc/Hz @ 100kHz, -130dBc/Hz @ 1MHz, -151dBc/Hz @ 10MHz
Output Logic (VOH) (VOL):	1.4V typical, 1.6V max./ 1.1V typical, 0.9V min.
Control Voltage Function (CVF) Pad 1:	
(CVF) Linearity: ± 1% typical ± 10% max:	(CVF) Absolute Voltage: 4.0V max. // (CVF) Center+ Range: + 1.5V ± 1.0V
(CVF) Transfer Function: Positive Transfer	(CVF) Input Impedance: 770 K typical // (CVF) Harmonics: -5.0 dBc max.
(CVF) Frequency Pulling Range:	± 8ppm min.
Output Enable Funktion (OEF) Pad 2:	Output Enable Time/ Disable Time: 200nS max. / 50nS max.
(OEF) Integrated Phase Jitter:	1.2 pS typical ( 12 KHz to 20 MHz ) ; < 150 fS ( 1.875 KHz to 21 MHz )
Rise/Fall Time (20% to 80% Vdd):	0.2 ns typical < 0.4 ns max. ; $T_r/T_f$ : 20% <-> 80% wave form
See also ....:	<a href="http://www.comtec-crystals.com/docs/G/GMX2.htm">http://www.comtec-crystals.com/docs/G/GMX2.htm</a>

## 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.