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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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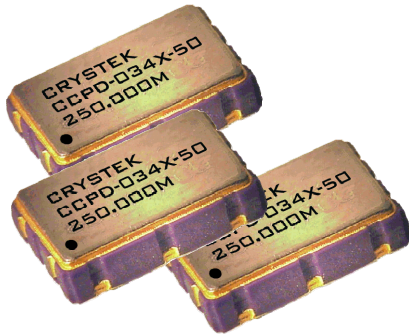




**CCPD-034 Model**  
5x7 mm SMD, 3.3V, LVPECL



Model CCPD-034 is a 162.000 MHz to 250.000 MHz LVPECL Clock Oscillator operating at 3.3 Volts. The oscillator utilizes a High Q Third Overtone crystal design providing very low Jitter and Phase Noise. No Sub-Harmonics are present in the Output Signal.



5x7mm SMD

**Applications:**

Digital Video  
SONET/SDH/DWDM  
Storage Area Networks  
Broadband Access  
Ethernet, Gigabit Ethernet

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**CCPD-034 Model**

5x7 mm SMD, 3.3V, LVPECL

<b>Frequency Range:</b>	<b>162.000 MHz to 250.000 MHz</b>
<b>Frequency Stability Options (ppm):</b>	<b>±20, ±25, ±50, ±100</b>
<b>Temperature Range:</b>	<b>(standard) 0°C to +70°C</b>
<b>(Option M)</b>	<b>-20°C to +70°C</b>
<b>(Option X)</b>	<b>-40°C to +85°C</b>
<b>Storage:</b>	<b>-45°C to 90°C</b>
<b>Input Voltage:</b>	<b>3.3V ±0.3V</b>
<b>Input Current:</b>	<b>55mA Typical, 88mA Max</b>
<b>Output:</b>	<b>Differential LVPECL</b>
<b>Symmetry:</b>	<b>45/55% Max @ 50% Vdd</b>
<b>Rise/Fall Time:</b>	<b>1nsec Max @ 20% to 80% Vdd</b>

**Logic: Terminated to Vdd-2V into 50 Ω**

**Temp. 0°C to 85°C**      **“0”=1.490 Min, 1.680 Max**

**“1”=2.275 Min, 2.420 Max**

**Temp. -40°C to 0°C**      **“0”=1.470 Min, 1.745 Max**

**“1”=2.215 Min, 2.420 Max**

**Disable Time:**      **200nSec Max**

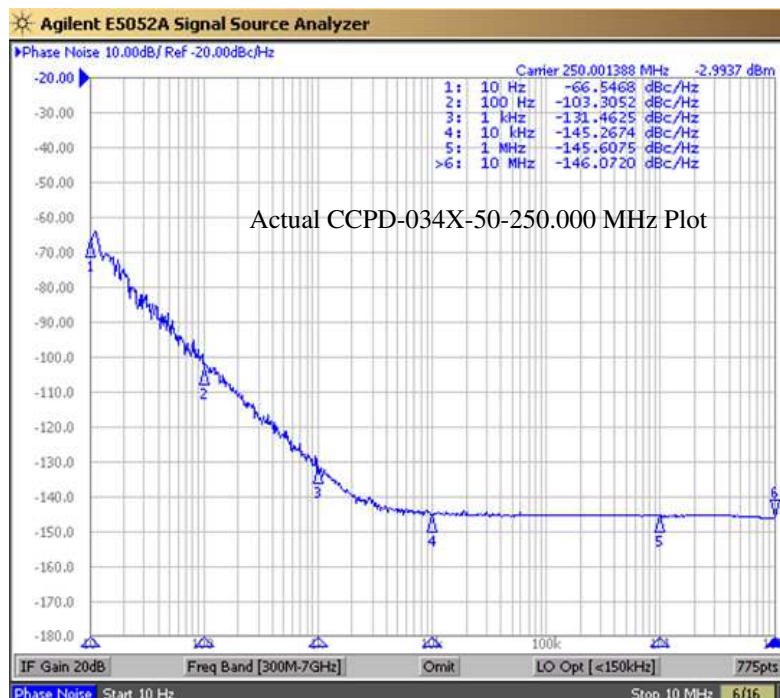
**Enable Time:**      **1mSec Typical, 2mSec Max**

**Phase Jitter: 12kHz~80MHz**      **0.5psec Typical, 1psec RMS Max**

**Phase Noise: (See Plot Below)**

**Sub-harmonics:**      **None**

**Aging:**      **<3ppm 1<sup>st</sup> year, <1ppm every year thereafter**



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**CCPD-034 Model**  
5x7 mm SMD, 3.3V, LVPECL

**Crystek Part Number Guide**

CCPD - 034 X - 50 - 250.000

#1 #2 #3 #4 #5

#1 Crystek LVPECL Osc.  
#2 Model 034  
#3 Temp Range: Blank = 0/70°C, M = -20/70°C, X = -40/85°C  
#4 Stability: (see Table 1)  
#5 Frequency in MHz: 3 or 6 decimal places

**Stability Indicator**

Blank	± 100ppm
50	± 50ppm
25	± 25ppm
20*	± 20ppm

\*not available in -40/85

Table 1

**Standard Frequencies**

(±50ppm, 0/70°C)  
200.000 MHz  
212.500 MHz  
250.000 MHz

**Example:**

CCPD-034X-50-250.000  
3.3V, -40/85°C, ±50ppm, 250.000 MHz

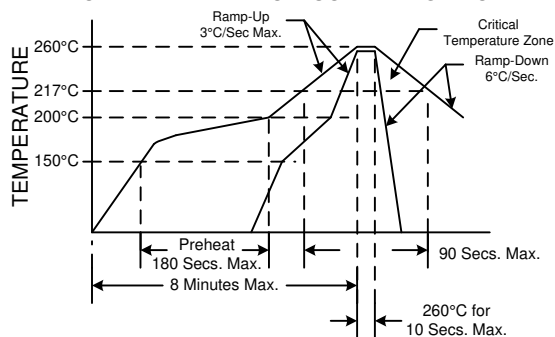
**Mechanical:**

Shock: MIL-STD-883, Method 2002, Condition B  
Solderability: MIL-STD-883, Method 2003  
Vibration: MIL-STD-883, Method 2007, Condition A  
Solvent Resistance: MIL-STD-202, Method 215  
Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition I or J

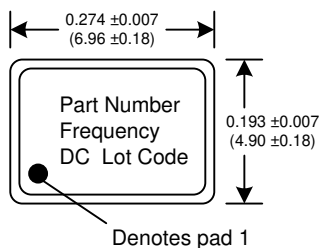
**Environmental:**

Thermal Shock: MIL-STD-883, Method 1011, Condition A  
Moisture Resistance: MIL-STD-883, Method 1004

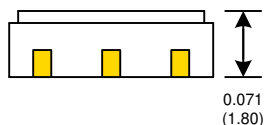
**RECOMMENDED REFLOW SOLDERING PROFILE**



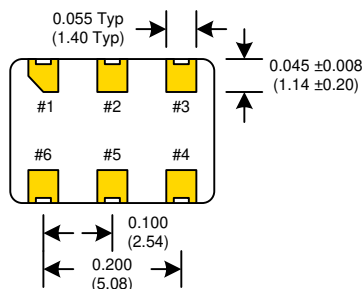
NOTE: Reflow Profile with 240°C peak also acceptable.



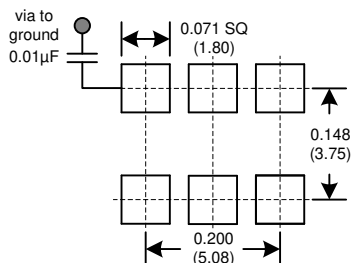
Dimensions inches (mm)  
All dimensions are Max unless otherwise specified.



Tristate Function	
Function pin 1	Output pin
Open or N/C	Active
"1" level 0.7×Vdd Min	Active
"0" level 0.3×Vdd Max	High Z



**SUGGESTED PAD LAYOUT**



0.01µF Bypass Capacitor Recommended

PIN	Connection
1	Enable/Disable
2	N/C
3	GND
4	Output
5	Comp Output
6	Vcc

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