

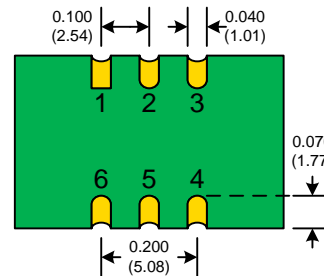
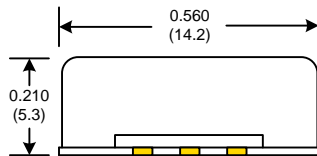
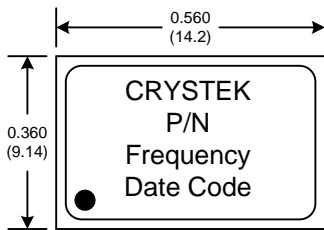
# Differential LVPECL Clock Oscillator



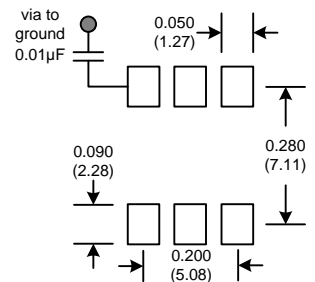
## CCPD-912 Model 9x14 mm SMD, 3.3V, LVPECL

<b>Frequency Range:</b>	77.760 MHz to 161.1328 MHz
<b>Frequency Stability:</b>	±20ppm to ±100ppm
<b>Temperature Range:</b>	0°C to 70°C
	(Option M) -20°C to 70°C
	(Option X) -40°C to 85°C
<b>Storage:</b>	-45°C to 90°C
<b>Input Voltage:</b>	3.3V ± 0.3V
<b>Input Current:</b>	55mA Typical, 88mA Max
<b>Output:</b>	Differential LVPECL
	Symmetry: 45/55% Max @ 50% Vdd
	Rise/Fall Time: 1ns Max @ 20% to 80% Vdd
	Logic: Terminated to Vdd-2V into 50 ohms
	Temp. 0°C to 85°C "0" = 1.490 Min, 1.680 Max
	Temp. -40°C to 0°C "1" = 2.275 Min, 2.420 Max
	"0" = 1.470 Min, 1.745 Max
	"1" = 2.215 Min, 2.420 Max
	Disable Time: 200ns Max
	Start-up Time: 1mSec Typical, 2mSec Max
<b>Jitter:</b>	12kHz to 20MHz
	0.45 psec Typical @ 80 MHz, 1ps RMS Max
	0.25 psec Typical @ 160 MHz, 1ps RMS Max
<b>Phase Noise:</b>	10Hz -65 dBc Typical
	100Hz -98 dBc Typical
	1kHz -125 dBc Typical
	10kHz -140 dBc Typical
	100kHz~100MHz -145 dBc Typical
<b>Aging:</b>	<3ppm 1 <sup>st</sup> year, <1ppm every year thereafter

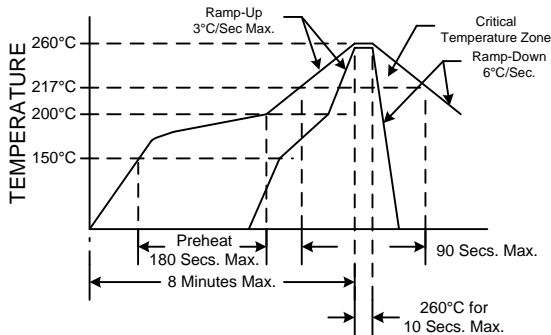
Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CCPD-912 is a very low noise, low jitter clock oscillator for demanding telecom and other applications.



### SUGGESTED PAD LAYOUT



### RECOMMENDED REFLOW SOLDERING PROFILE



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

### Crystek Part Number Guide

CCPD-912 X - 25 - 155.520

#1 #2 #3 #4 #5

- #1 Crystek SMD PECL Osc.
- #2 Model 912 = 9x14mm smd 6pad 3.3V
- #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 (std)	± 100ppm
50	± 50ppm
25	± 25ppm
20 **	± 20ppm
** only available 0/70°C	

Example:  
CCPD-912X-25-155.520 = 3.3V, 45/55, -40/85°C, 25ppm, 155.520 MHz

Table 1

PIN	Function
1	E/D
2	NC
3	GND
4	OUT
5	COU
6	Vdd

Tri-State Function	
Function pin 1	Output pin
Open	Active
"1" level 0.7V Min	Active
"0" level 0.3V Max	High Z

Specifications subject to change without notice.

TD-030403 Rev. F