

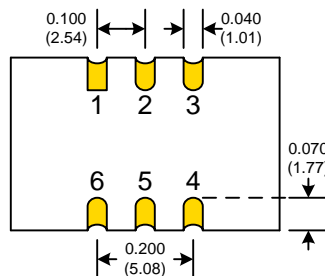
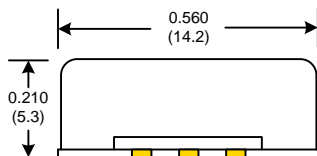
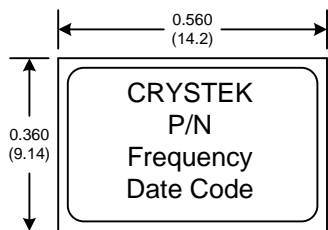
Differential LVPECL Clock Oscillator

CCPD-915 Model FR5 9x14 mm SMD, 3.3V, LVPECL

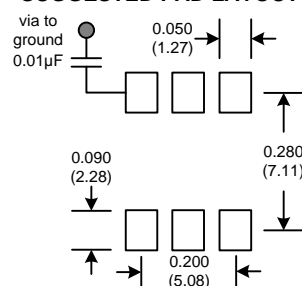
Frequency Range:	166.6286MHz to 330MHz
Standard Frequencies	See Table 2
Frequency Stability:	±50ppm & ±100ppm
Temperature Range:	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
Storage:	-55°C to 120°C
Input Voltage:	3.3V ± 0.3V
Input Current:	55mA Typ, 88mA Max
Output:	Differential LVPECL
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
	"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
	200ns Max
Disable Time	1ms Typ., 2ms Max
Start-up Time	0.45 psec Typ. @ 80 MHz, 1ps RMS Max
Jitter:	12kHz to 20MHz
	0.25 psec Typ. @ 160 MHz, 1ps RMS Max
Phase Noise:	10Hz
	100Hz
	1kHz
	10kHz
	100kHz - 100MHz
	-65dBc Typical
	-98dBc Typical
	-125dBc Typical
	-140dBc Typical
	-145dBc Typical
Aging:	<3ppm 1st/yr, <2ppm every year thereafter



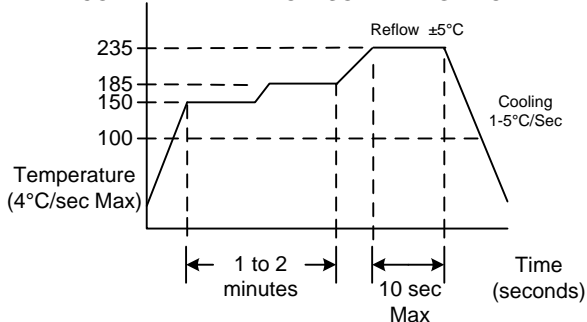
Designed using high frequency fundamental crystal design to meet today's requirements for 3.3V High Frequency Differential LVPECL applications. The CCPD-915 is a very low noise, low jitter clock oscillator for demanding telecom and other applications. Available on tape and reel in quantities of 500ea.



SUGGESTED PAD LAYOUT



RECOMMENDED REFLOW SOLDERING PROFILE



260°C Reflow Profile NOT recommended for this product

PIN	Function
1	E/D
2	NC
3	GND
4	OUT
5	COU \bar{T}
6	Vdd

Standard Frequencies	
166.6286	245.7600
167.3316	250.0000
212.5000	311.0400

Table 2

Crystek Part Number Guide

CCPD-915 X - 50 - 166.6286

#1 #2 #3 #4 #5

- #1 Crystek SMD PECL Osc.
- #2 Model 915 = 3.3V 9x14mm Mesa Fund. Osc.
- #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

Table 1

Example:
CCPD-915X-50-166.628600 = 3.3V, 45/55, -40/85°C, 50ppm, 166.628600 MHz

Tri-State Function

Function pin 1	Output pin	Oscillator State
Open	Active	Normal Operation
"1" level 0.7V Min	Active	Normal Operation
"0" level 0.3V Max	High Z	Stopped

Specifications subject to change without notice.

TD-030406 Rev. G