

CCPD-915 Model

FR5 9X14 mm SMD, 3.3V, LVPECL

Lead Free
RoHS
Compliant

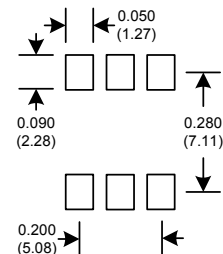
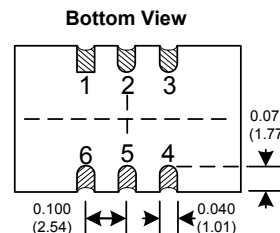
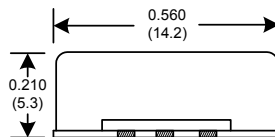
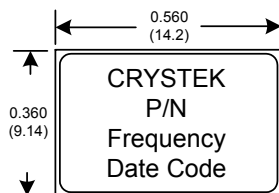
Differential LVPECL Clock Oscillator



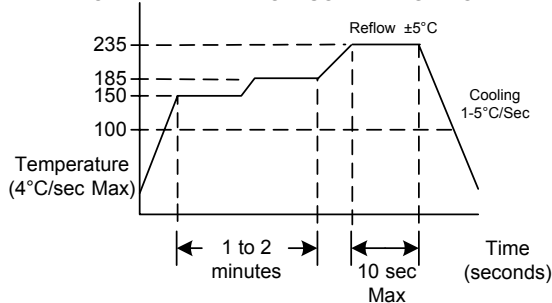
Frequency Range:	166.6286MHz to 330MHz
Standard Frequencies	See Table 3
Frequency Stability:	±50ppm & ±100ppm
Temperature Range:	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
Storage:	-55°C to 120°C
Input Voltage:	3.3V ± 0.3V
Input Current:	55mA Typ, 88mA Max
Output:	Differential LVPECL
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
	1ms Typ., 2ms Max
Jitter:	12KHz to 20MHz
	0.45 psec Typ. @ 80 MHz, 1ps RMS Max
	0.25 psec Typ. @ 160 MHz, 1ps RMS Max
Phase Noise:	10Hz
	100Hz
	1KHz
	10KHz
	100KHz - 100MHz
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

Pad	Connection
1	E/D
2	N/C
3	GND
4	OUT
5	COU
6	Vdd

Table 2

Standard Frequencies	
166.6286	245.7600
167.3316	250.0000
212.5000	311.0400

Table 3

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

Standby Function		
Function pin 1	Output pin	Oscillator State
Open	Active	Normal Operation
"1" level .7Vcc Min	Active	Normal Operation
"0" level .3Vcc Max	High Z	Stopped

Specifications subject to change without notice.

TD-030406 Rev. F



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