

# Differential LVPECL Voltage Controlled Crystal Oscillator

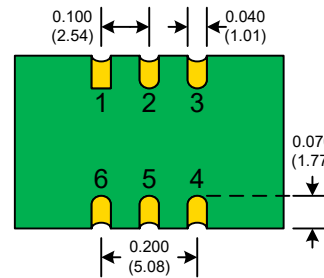
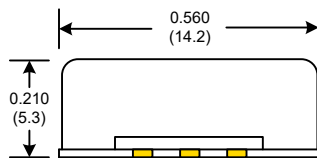
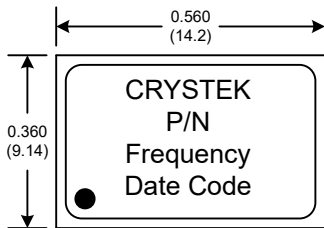
## CVPD-914 Model

9x14 mm SMD, 3.3V, LVPECL

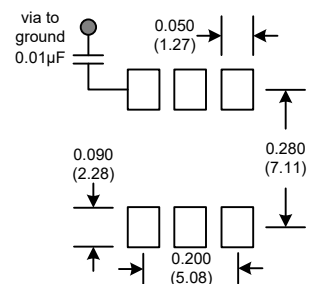
<b>Frequency Range:</b>	77.760 MHz to 200 MHz
<b>Temperature Range:</b>	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
<b>Storage:</b>	-45°C to 90°C
<b>Input Voltage:</b>	3.3V ±0.3V
<b>Control Voltage:</b>	1.65V ±1.65V
<b>Settability At Nominal:</b>	1.65V ±0.25V
<b>Input Current:</b>	50mA Typical, 88mA Max
<b>Output:</b>	Differential LVPECL
Symmetry:	45/55% Max @ zero crossing point
Rise/Fall Time:	1nSec Max (20% to 80%)
Pulling Range:	±50ppm APR Min (std)
Linearity:	±10% Max
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
Enable/Disable Time	200nSec Max
<b>Jitter:</b>	12 kHz to 80 MHz
<b>Aging:</b>	0.5pSec Typical, 1pSec RMS Max
	<5ppm 1 <sup>st</sup> year, <2ppm every year thereafter



Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CVPD-914 is produced using mesa crystal design to provide a very low noise, low jitter voltage controlled clock oscillator for demanding telecom and other applications.

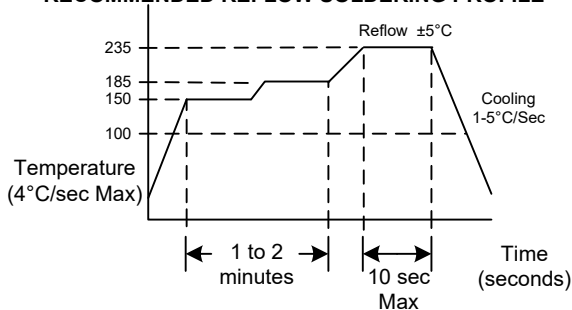


### SUGGESTED PAD LAYOUT



**PAD FINISH:** Immersion Gold (ENIG); 5 micro inches maximum

### RECOMMENDED REFLOW SOLDERING PROFILE



260°C Reflow Profile NOT recommended for this product

### Crystek Part Number Guide

**CVPD-914 - X - 50 - 155.520**

#1	#2	#3	#4	#5
#1 Crystek 9x14 SMD PECL VCXO	#2 Model 033 = 3.3V	#3 Temp. Range: Blank = 0/70°C, M= -20/70°C, X= -40/85°C	#4 Pulling: (see Table 1)	#5 Frequency in MHz: 3 or 6 decimal places
				<b>Pulling (APR) Min.</b>
				Blank ± 100ppm
				50 (std) ± 50ppm
				25 ± 25ppm
				20 ± 20ppm

Table 1

Example:  
CVPD-914X-50-155.520 = 3.3V, 45/55, -40/85°C, 50ppm APR, 155.520 MHz

### Standard Frequencies

77.760	161.1328
155.520	166.6286
156.250	167.3316

PIN	Function
1	Volt Cont.
2	E/D
3	GND
4	OUT
5	COU
6	Vcc

Enable/Disable Function	
E/D Pin	Output pin
Open	Active
"1" level 0.7×Vcc Min	Active
"0" level 0.3×Vcc Max	High Z

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