

# CVPD-914 Model 9X14 mm SMD, 3.3V, LVPECL



# Differential LVPECL Voltage Controlled Crystal Oscillator

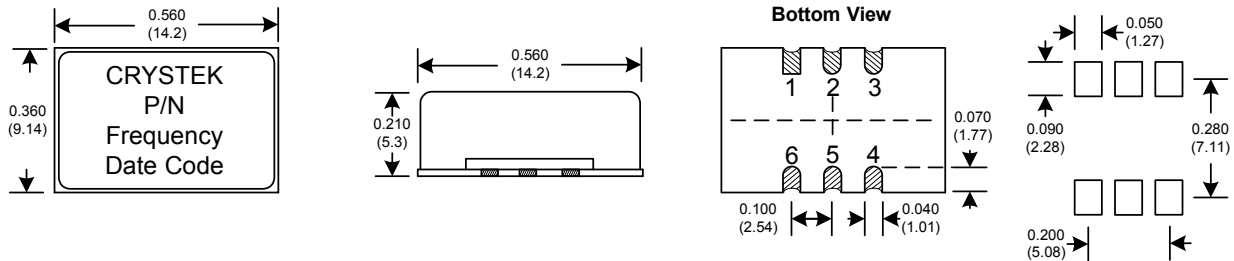


<b>Frequency Range:</b>	77.760MHz to 200MHz
<b>Temperature Range:</b>	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
<b>Storage:</b>	-55°C to 120°C
<b>Input Voltage:</b>	3.3V ± 0.3V
<b>Control Voltage:</b>	1.65V ± 1.65V
<b>Settability At Nominal:</b>	1.65V ± 0.25V
<b>Input Current:</b>	50mA Typ, 88mA Max
<b>Output:</b>	Differential LVPECL
Symmetry:	45/55% Max @ 50% Vdd
Rise/Fall Time:	1ns Max @ 20% to 80% Vdd
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	200ns Max
<b>Jitter:</b>	12KHz to 80MHz 0.5psec Typ., 1psec RMS Max

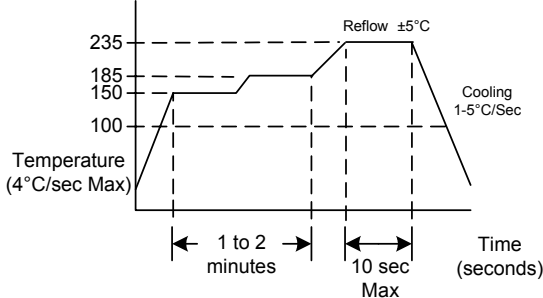
Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CVPD-914 is produced using mesa crystal design to provide a very low noise, low jitter voltage controlled clock oscillator for demanding telecom and other applications.

**Aging:** <5ppm 1st/yr, <2ppm every year thereafter

### SUGGESTED PAD LAYOUT



### 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				

#### Pulling (APR) Min.

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

Pad	Connection
1	Volt Cont.
2	E/D
3	GND
4	OUT
5	COUT
6	Vdd

Standard Frequencies	
77.760	161.1328
155.520	166.6286
156.250	167.3316

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

Specifications subject to change without notice.

TD-030401 Rev. G



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