

Differential LVPECL Voltage Controlled Crystal Oscillator

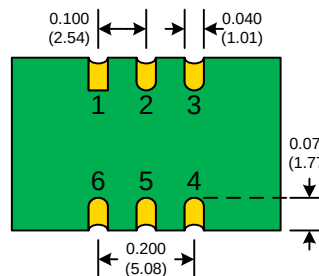
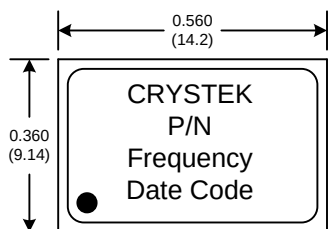
CVPD-914 Model

9×14 mm SMD, 3.3V, LVPECL

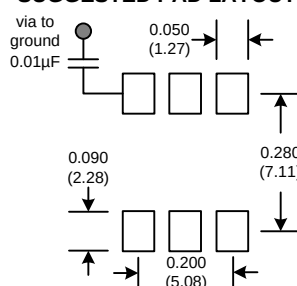
Frequency Range:	77.760 MHz to 200 MHz
Temperature Range:	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
Storage:	-45°C to 90°C
Input Voltage:	3.3V ±0.3V
Control Voltage:	1.65V ±1.65V
Settability At Nominal:	1.65V ±0.25V
Input Current:	50mA Typical, 88mA Max
Output:	Differential LVPECL
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
Jitter: 12 kHz to 80 MHz	0.5pSec Typical, 1pSec RMS Max
Aging:	<5ppm 1 st year, <2ppm every year thereafter



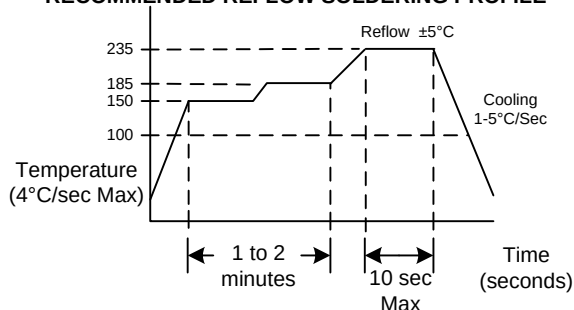
Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CVPD-914 is produced using mesa crystal design to provide a very low noise, low jitter voltage controlled clock oscillator for demanding telecom and other applications.



SUGGESTED PAD LAYOUT



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 9×14 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

PIN	Function
1	Volt Cont.
2	E/D
3	GND
4	OUT
5	COUT
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

Standard Frequencies	
77.760	161.1328
155.520	166.6286
156.250	167.3316

Specifications subject to change without notice.

TD-030401 Rev. M