

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



Differential LVPECL Voltage Controlled Crystal Oscillator

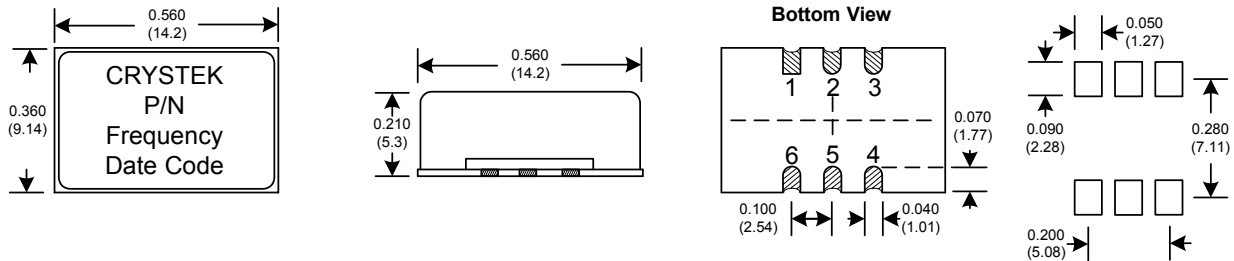


Frequency Range: 77.760MHz to 200MHz
Temperature Range: 0°C to 70°C
 (Option M) -20°C to 70°C
 (Option X) -40°C to 85°C
Storage: -55°C to 120°C
Input Voltage: 3.3V ± 0.3V
Control Voltage: 1.65V ± 1.65V
Settability At Nominal: 1.65V ± 0.25V
Input Current: 50mA Typ, 88mA Max
Output: Differential LVPECL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

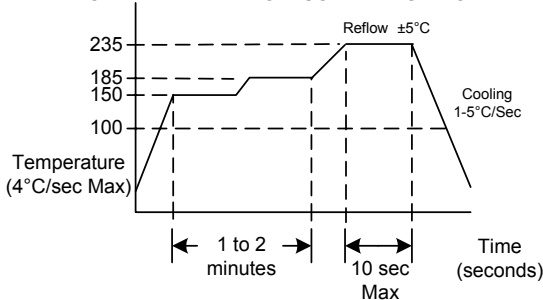
Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CVPD-914 is produced using mesa crystal design to provide a very low noise, low jitter voltage controlled clock oscillator for demanding telecom and other applications.

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	COU
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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