

CCPD-920 Model 9X14 mm SMD, 3.3V, LVPECL



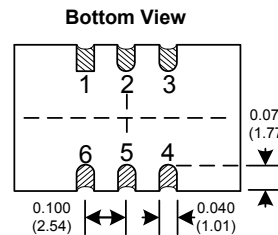
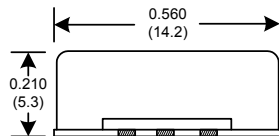
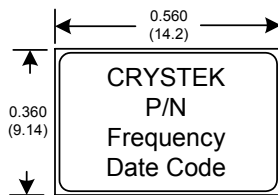
Differential LVPECL Clock Oscillator



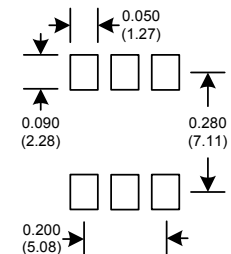
Frequency Range:	50MHz to 150MHz
Frequency Stability:	±20, ±25, ±50ppm (0°C to 70°C) ±25, ±50ppm (-40°C to 85°C)
Temperature Range:	0°C to 70°C
	(Option X) -40°C to 85°C
Storage:	-55°C to 120°C
Input Voltage:	3.3V ± 0.3V
Input Current:	88mA Max
Output:	Differential LVPECL
Symmetry:	45/55% Max @ 50% Vdd
Rise/Fall Time:	1ns Max @ 20% to 80% Vdd
Linearity:	± 10% Max
Logic:	Terminated to Vdd-2V into 50 ohms
	Logic "0" "0" = Vcc-1.85V Min, Vcc-1.62V Max
	Logic "1" "1" = Vcc-1.02V Min, Vcc-0.81V Max
Disable Time	200ns Max
Start-up Time	1ms Typ., 2ms Max
Phase Jitter:	12KHz to 80MHz 0.5psec Typ., 1psec RMS Max
Phase Noise:	10Hz -65dBc/Hz Typical
	100Hz -98dBc/Hz Typical
	1KHz -125dBc/Hz Typical
	10KHz -140dBc/Hz Typical
	100KHz - 100MHz -145dBc/Hz Typical

Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CCPD-920 is produced using our cost saving FR5 PCB and UM-1 overtone crystal technology. This design offers considerable cost savings over other HFF XO's products. Also available in 14 pin dip fully hermetic package.

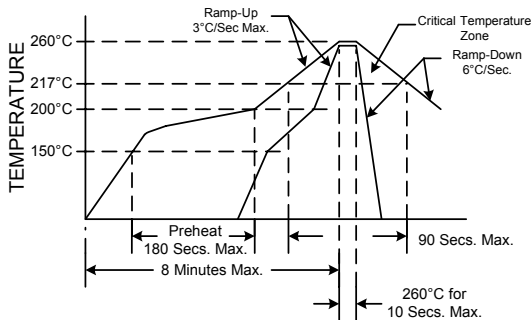
Aging: <3ppm 1st/yr, <1ppm every year thereafter



SUGGESTED PAD LAYOUT



RECOMMENDED REFLOW SOLDERING PROFILE



NOTE: Reflow Profile with 240°C peak also acceptable.

Enable/Disable Function	
Pin 2	Output Pin
Open	Active
"0" level Vcc-1.620V Max	Active
"1" level Vcc-1.025V Min	Disabled
Disabled State:	
Pin 4 will assume a fixed level of logic "0"	
Pin 5 will assume a fixed level of logic "1"	

Crystek Part Number Guide

CCPD-920 X - 25 - 100.000

#1	#2	#3	#4	#5
#1 Crystek 9x14 SMD PECL OSC	#2 Model 920	#3 Temp. Range: Blank = 0/70°C, X=-40/85°C	#4 Stability: (see Table 1)	#5 Frequency in MHz: 3 or 6 decimal places

Stability Indicator:

20 = 0/70°C (±20ppm)
 25 = 0/70°C (±25ppm)
 50 = 0/70°C (±50ppm)
 25 = -40/85°C (±25ppm)
 50 = -40/85°C (±50ppm)

Table 1

Example:
 CCPD-920X-25-100.000 = 3.3V, 45/55, -40/85°C, 25ppm, 100.000 MHz

Pad	Connection
1	N/C
2	E/D
3	GND
4	OUT
5	COU \bar{T}
6	Vdd

Specifications subject to change without notice.

TD-051101 Rev. B



Crystek Crystals Corporation

12730 Commonwealth Drive • Fort Myers, FL 33913
 239.561.3311 • 800.237.3061 • FAX: 239.561.1025 • www.crystek.com