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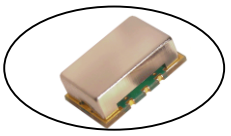


Differential LVPECL Clock Oscillator

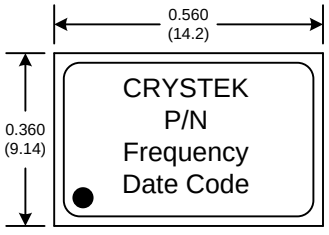
CCPD-920 Model
9×14 mm SMD, **3.3V, LVPECL**

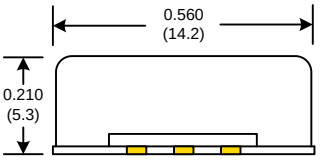
Frequency Range:		50 MHz to 150 MHz
Frequency Stability:		±20, ±25, ±50ppm (0°C to 70°C)
		±25, ±50ppm (-40°C to 85°C)
Temperature Range:		0°C to 70°C
	(Option X)	-40°C to 85°C
Storage:		-45°C to 90°C
Input Voltage:		3.3V ± 0.3V
Input Current:		88mA Max
Output:		Differential LVPECL
	Symmetry:	45/55% Max @ zero crossing point
	Rise/Fall Time:	1ns Max (20% to 80%)
	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 Typical, 2ms Max
Phase Jitter:	12kHz to 80MHz	0.5psec Typical, 1psec RMS Max
Phase Noise:	10Hz	-65 dBc/Hz Typical
	100Hz	-98 dBc/Hz Typical
	1kHz	-125 dBc/Hz Typical
	10kHz	-140 dBc/Hz Typical
	100kHz - 100MHz	-145 dBc/Hz Typical
Aging:		<3ppm 1st year, <1ppm every year thereafter

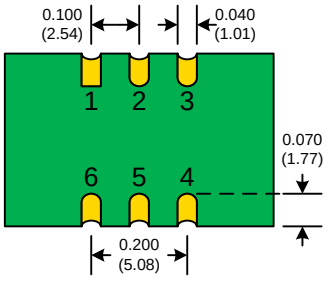
RoHS Compliant

CRYSTEK CORPORATION
MADE IN THE USA

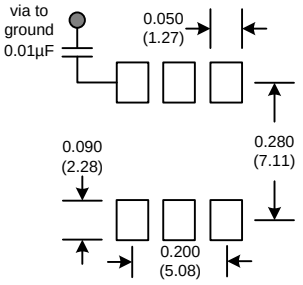
Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CCPD-920 is produced using our cost saving FR5 PCB and UM-1 overtone crystal technology. This design offers considerable cost savings over other HFF XO's products. Also available in 14 pin dip fully hermetic package.







SUGGESTED PAD LAYOUT



RECOMMENDED REFLOW SOLDERING PROFILE
900034 (See App Note listed on website)
http://www.crystek.com/specification/reflow/900034.pdf

PIN	Function
1	NC
2	E/D
3	GND
4	OUT
5	$\overline{\text{OUT}}$
6	Vdd

Tri-State Function	
Function pin 2	Output pin
Open	Active
"0" level Vcc-1.620V Max	Active
"1" level Vcc-1.025V Min	High Z
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 9×14 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)

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

Table 1

Specifications subject to change without notice.

TD-051101 Rev. G

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