CRYSTEK CRYSTALS
A Division of Crystek Corporation

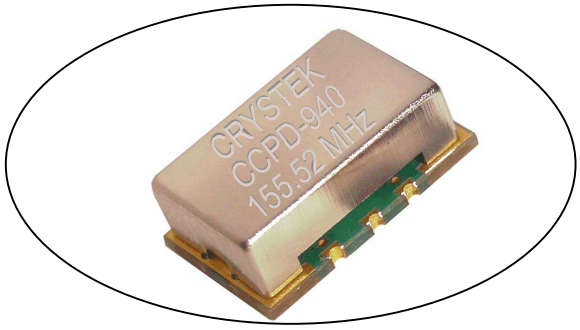
Differential LVPECL Clock Oscillator

CCPD-940 Model
9×14 mm SMD, **3.3V, LVPECL**

RoHS Compliant

CRYSTEK CORPORATION
MADE IN THE USA

Frequency Range:		151.000 MHz to 212.500 MHz
Stability vs. Temperature (ppm):		±20, ±25, ±50, ±100
Temperature Range:		0℃ to 70℃
	(Option X)	-40℃ to 85℃
Storage:		-45℃ to 90℃
Input Voltage:		3.3V ±0.3V
Input Current:		88mA Max
Output:		Differential LVPECL
	Symmetry:	49/51% Typical, 45/55% Max
	Rise/Fall Time:	550ps Max @ 20% to 80% Vcc
	Linearity:	±10% Max
	Load: Terminated to Vdd-2V	into 50 ohms
	Logic "1" Level:	Vcc-0.96V Min, Vcc-0.81V Max
	Logic "0" Level:	Vcc-1.85V Min, Vcc-1.65V Max
	Disable Time:	100ns Max
	Start-up time:	2ms Typical, 10ms Max
Modulation BW:		>10kHz @ -3dB
Sub-Harmonics:		none
Period Jitter:	(20,000 periods)	<5ps RMS (1-sigma) Max
Phase Jitter:	12kHz~20MHz	<1ps RMS (1-sigma) Max
	50kHz~80MHz	<1ps RMS (1-sigma) Max
Phase Noise Max:	100Hz	-80 dBc/Hz
	1kHz	-108 dBc/Hz
	10kHz	-132 dBc/Hz
	100kHz	-140 dBc/Hz
Aging:		<3ppm 1st year, <1ppm every year thereafter



Applications:
- 10 Gigabit Ethernet
- OC48: Forward Error Correction
- Broadband Networks
- SONET/SDH/DWD
- ATM
- Network/switch
- Telecom

Designed using FR5 PCB & High Q crystal technology to provide a Low Noise, Low Jitter Voltage Controlled Crystal Oscillator solution at a competitive price.

Specifications subject to change without notice.

CRYSTEK CORPORATION
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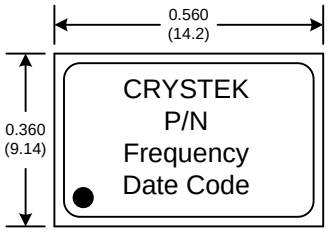
Crystek Part Number Guide

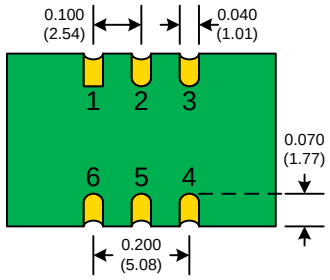
CCPD-940 X - 25 - 155.520
#1 #2 #3 #4 #5

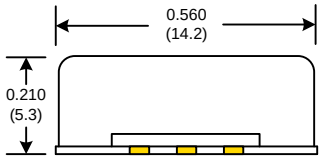
#1 Crystek 9×14 SMD PECL
#2 Model 940 = High Frequency 3.3V
#3 Temp. Range: Blank = 0/70℃, X=-40/85℃
#4 Stability = 20ppm, 25ppm, 50ppm, Blank=100ppm
#4 Frequency in MHz: 3 or 6 decimal places

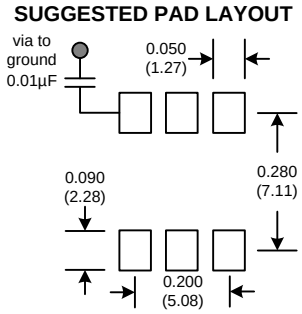
Example:
CCPD-940X-25-155.520 = 3.3V,-40/85℃,25ppm,155.520 MHz

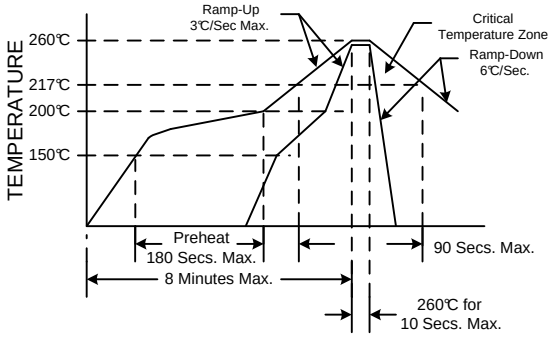
Standard Frequencies MHz	
151.0000	166.6286
155.5200	167.3317
156.2500	200.0000
161.1328	212.5000











NOTE: Reflow Profile with 240℃ peak also acceptable.

PIN	Function
1	NC
2	E/D
3	GND
4	OUT
5	COUT
6	Vdd

Enable/Disable Function	
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"	

Mechanical:

Shock:	MIL-STD-883, Method 2002, Condition B
Solderability:	MIL-STD-883, Method 2003
Vibration:	MIL-STD-883, Method 2007, Condition A
Solvent Resistance:	MIL-STD-202, Method 215
Resistance to Soldering Heat:	MIL-STD-202, Method 210, Condition I or J

Environmental:

Thermal Shock:	MIL-STD-883, Method 1011, Condition A
Moisture Resistance:	MIL-STD-883, Method 1004

Packaging:

Tape/Reel:	100ea, 250ea, 500ea 24mm Tape

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