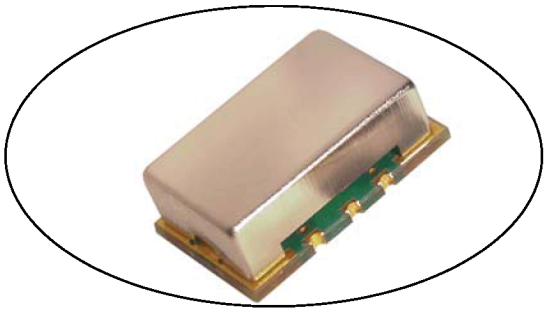
CVPD-940 Model
9X14 mm SMD, **3.3V, LVPECL**

Lead Free RoHS Compliant

Differential LVPECL VCXO

Frequency Range:		50MHz to 250MHz
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
Control Voltage:		1.65V ± 1.65V
Settability At Nominal:		1.65V ± 0.25V
Input Current:		88mA Max
Output:		Differential LVPECL
Symmetry:		49/51% Typ, 45/55% Max
Rise/Fall Time:		550ps Max @ 20% to 80% Vcc
Pullability APR:		±50ppm Min.
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 Typ., 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/yr, <2ppm every year thereafter



Applications:

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

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

CVPD-940 Model
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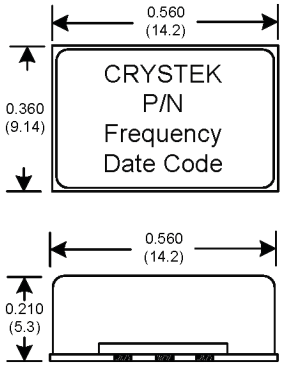
Crystek Part Number Guide

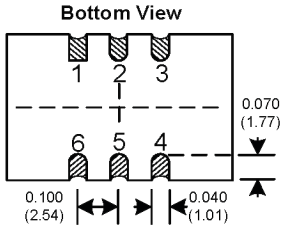
CVPD-940 X-155.520
#1 #2 #3 #4

#1 Crystek SMD PECL VCXO
#2 Model 940 = 9x14 High Frequency 3.3V
#3 Temp. Range: Blank = 0/70°C, X=-40/85°C
#4 Frequency in MHz: 3 or 6 decimal places

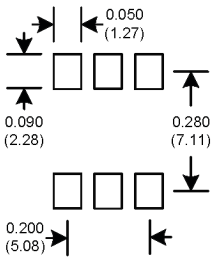
Example:
CVPD-940X-155.520 = 3.3V, -40/85°C, 155.520 MHz

Standard Frequencies MHz	
74.1758	161.1328
74.250	166.6286
77.7600	167.3317
155.5200	212.5000
156.2500	250.0000



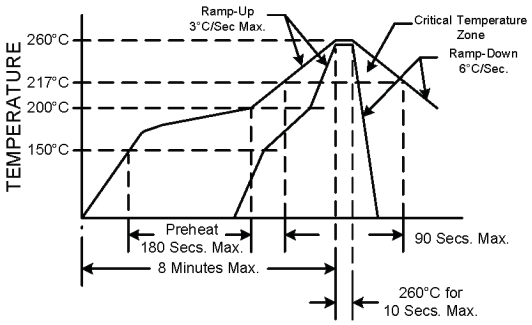


SUGGESTED PAD LAYOUT



Pad	Connection
1	Volt Cont.
2	E/D
3	GND
4	OUT
5	COUT
6	Vdd

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"	

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