



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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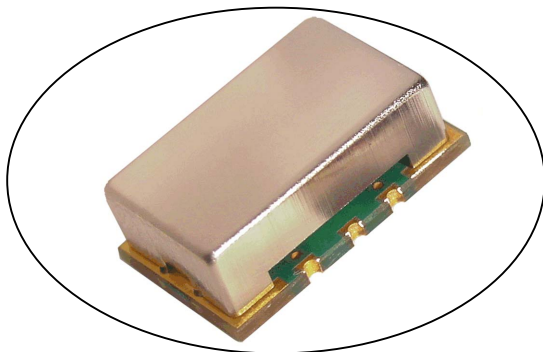
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Differential LVPECL VCXO

CVPD-970 Model
9x14 mm SMD, 3.3V, LVPECL

Frequency Range:	622.080 MHz to 670 MHz
Frequency Stability:	±25ppm
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
Control Voltage:	1.65V ±1.65V
Input Current:	80mA Max
Output:	Differential LVPECL
Symmetry:	49/51% Typical, 45/55% Max
Rise/Fall Time:	0.4ns 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 Typical, 10ms Max
Modulation BW:	>10kHz @ -3dB
Sub-harmonics:	-40dBc
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 Typical: 100Hz	-80 dBc/Hz
1kHz	-108 dBc/Hz
10kHz	-132 dBc/Hz
100kHz	-140 dBc/Hz
Aging:	<3ppm 1 st year, <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 Clock Oscillator solution at a competitive price.

Specifications subject to change without notice.

TD-030607 Rev. F
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Differential LVPECL VCXO



CVPD-970 Model
9x14 mm SMD, 3.3V, LVPECL

Crystek Part Number Guide

CVPD - 970 - X - 622.080

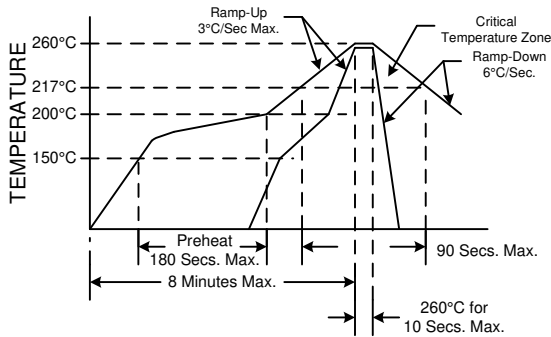
- #1 Crystek 9x14 SMD PECL VCXO
- #2 Model 970 = High Frequency 3.3V
- #3 Temp. Range: Blank = 0/70°C, X = -40/85°C
- #4 Frequency in MHz: 3 or 6 decimal places

Example:
CVPD-970X-622.080 = 3.3V, -40/85°C, 622.080 MHz

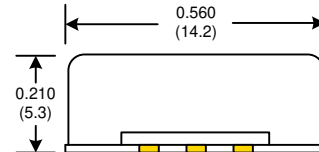
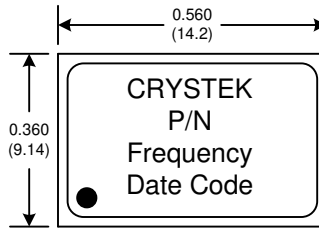
Standard Frequencies MHz

622.080	666.514300
625.000	669.128100
644.531300	669.326500

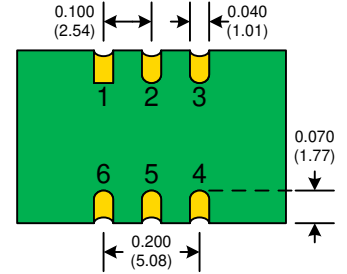
RECOMMENDED REFLOW SOLDERING PROFILE



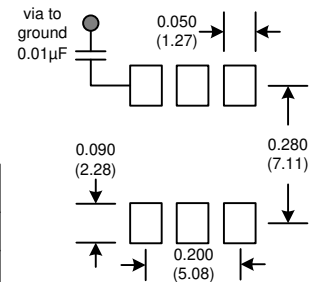
NOTE: Reflow Profile with 240°C peak also acceptable.



PIN	Function
1	Vcont
2	E/D
3	GND
4	OUT
5	COU
6	Vdd



SUGGESTED PAD LAYOUT



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:
- Solderability:
- Vibration:
- Solvent Resistance:
- Resistance to Soldering Heat:

- MIL-STD-883, Method 2002, Condition B
- MIL-STD-883, Method 2003
- MIL-STD-883, Method 2007, Condition A
- MIL-STD-202, Method 215
- MIL-STD-202, Method 210, Condition I or J

Environmental:

- Thermal Shock:
- Moisture Resistance:

- MIL-STD-883, Method 1011, Condition A
- MIL-STD-883, Method 1004

Packaging:

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