

CVPD-034 Model

5X7 mm SMD, 3.3V, LVPECL

Lead Free
RoHS
Compliant

Differential LVPECL

Voltage Controlled

Clock Oscillator

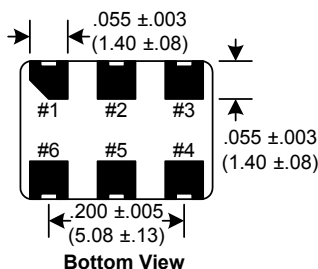
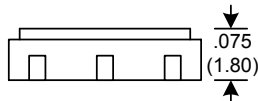
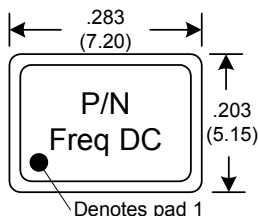


Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CVPD-034 is a HFF Crystal based VCXO that provides very low phase noise & jitter for demanding telecom and other applications. Available on 16mm tape and reel in quantities of 100, 500 and 1,000pcs..

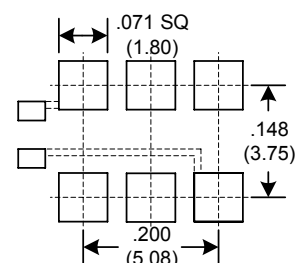
Frequency Range:	77.760MHz to 200MHz
Temperature Range:	0°C to 70°C
(Option M)	-20°C to 70°C
(Option X)	-40°C to 85°C
Storage:	-45°C to 90°C
Input Voltage:	3.3V ± 0.3V
Control Voltage:	1.65V ± 1.65V
Input Current:	50mA Typ, 88mA Max
Output:	Differential LVPECL
Symmetry:	45/55% Max @ 50% Vdd
Rise/Fall Time:	1ns Max @ 20% to 80% Vdd
Pulling Range:	±50ppm APR Min. (std)
Linearity:	± 10% Max
Logic:	Terminated to Vdd-2V into 50 ohms
Temp. 0°C to 85°C	"0" = 1.490 Min, 1.680 Max
	"1" = 2.275 Min, 2.420 Max
Temp. -40°C to 0°C	"0" = 1.470 Min, 1.745 Max
	"1" = 2.215 Min, 2.420 Max
Enable/Disable Time	200ns Max
Jitter:	12KHz to 80MHz
	0.5psec Typ., 1psec RMS Max
Phase Noise:	10Hz
(Ref: 122.88MHz)	-60dBc/Hz Typical
	100Hz
	-95dBc/Hz Typical
	1KHz
	-120dBc/Hz Typical
	10KHz
	-140dBc/Hz Typical
	100KHz
	-145dBc/Hz Typical
Aging:	<5ppm 1st/yr, <2ppm every year thereafter

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

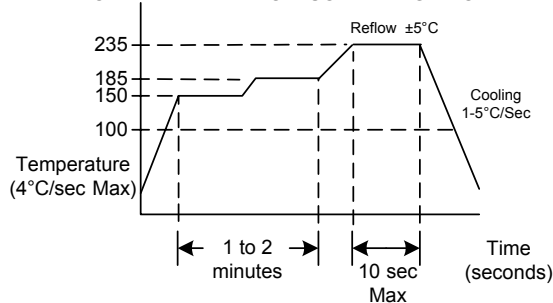


SUGGESTED PAD LAYOUT



Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



260°C Reflow Profile NOT recommended for this product

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

Standard Frequencies	
77.760	161.1328
155.520	166.6286
156.250	167.3316

Crystek Part Number Guide

CVPD-034 X - 50 - 155.520

#1	#2	#3	#4	#5
#1 Crystek 5x7 SMD PECL VCXO				
#2 Model 034 = 3.3V				
#3 Temp. Range: Blank = 0/70°C, M= -20/70°C, X= -40/85°C				
#4 Pulling: (see Table 1)				
#5 Frequency in MHz: 3 or 6 decimal places				

Pulling (APR) Min.

Blank	± 100ppm
50 (std)	± 50ppm
25	± 25ppm
20	± 20ppm

Table 1

Example:

CVPD-034X-50-155.520 = 3.3V, 45/55, -40/85°C, 50ppm APR, 155.520 MHz

Enable/Disable Function	
E/D pin	Output pin
Open	Active
"1" level 0.7V Min	Active
"0" level 0.3V Max	High Z

Specifications subject to change without notice.

TD-030303 Rev.J



Crystek Crystals Corporation

12730 Commonwealth Drive • Fort Myers, FL 33913

239.561.3311 • 800.237.3061 • FAX: 239.561.1025 • www.crystek.com