

Differential LVDS Voltage Controlled Crystal Oscillator

CVLD-025 Model 5x7 mm SMD, 2.5V, LVDS

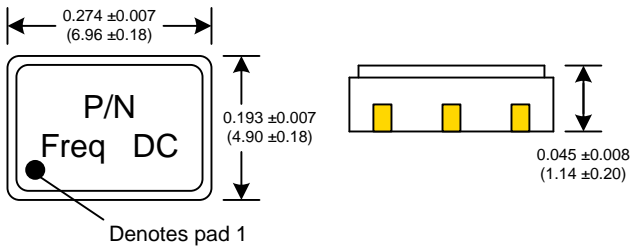


| | |
|-------------------------------|--|
| Frequency Range: | 50 MHz to 200 MHz |
| Temperature Range: | 0°C to 70°C |
| Storage: | -45°C to 90°C |
| Input Voltage: | 2.5V ±0.125V |
| Control Voltage: | 1.25V ±1.25V |
| Input Current: | 50mA Typ, 80mA Max |
| Output: | Differential LVDS |
| Symmetry: | 40/60% Max @ 50% Vdd |
| Rise/Fall Time: | 1ns Max |
| Pulling Range: | ±50ppm APR Min (std) |
| Linearity: | ±10% Max |
| Logic: Terminated 100 ohms | (Offset 1.25V Typical) |
| Temp. 0°C to 70°C | "0" = 1.10 Typical "1" = 1.43 Typical |
| Jitter: 12kHz to 20MHz | 0.5psec Typ., 1psec RMS Max |
| Ageing: | <5ppm 1 st /yr, <2ppm every year thereafter |

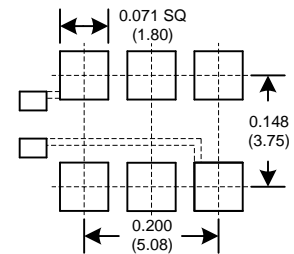
Designed to meet today's requirements for 2.5V Differential LVDS applications. The CVLD-025 provides very low phase noise & jitter for demanding applications. Available on 16mm tape and reel in quantities of 1,000pcs.

Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

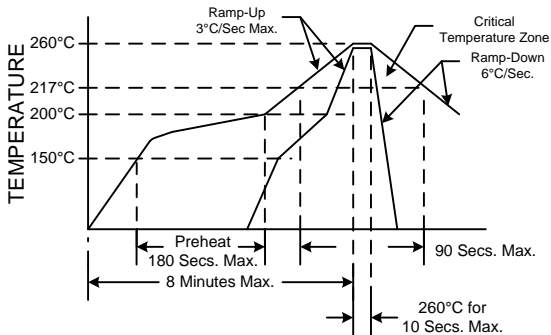


SUGGESTED PAD LAYOUT



0.01uF Bypass Capacitor Recommended

RECOMMENDED REFLOW SOLDERING PROFILE



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

Crystek Part Number Guide

CVLD - 025 - X - X - 155.520

#1 #2 #3 #4 #5

#1 Crystek 5x7 SMD PECL VCXO
#2 Model 025 = 2.5V
#3 Temp. Range: Blank = 0/70°C
#4 Frequency Pulling: (see Table 1)
#5 Frequency in MHz: 3 or 6 decimal places

Pulling (APR) Min.

Blank ± 100ppm
50 (std) ± 50ppm

Table 1

Example:
CVLD-025-50-155.520 = 2.5V, 0/70°C, 50ppm APR, 155.520 MHz

| PIN | Connection |
|-----|-------------|
| 1 | Volt Cont. |
| 2 | E/D |
| 3 | GND |
| 4 | Output |
| 5 | Comp Output |
| 6 | Vdd |

| Enable/Disable Function | |
|-------------------------|------------|
| Function pin 2 | Output pin |
| Open | Active |
| "1" level 2.2V Min | Active |
| "0" level 0.4V Max | High Z |

Specifications subject to change without notice.

TD-070301 Rev. C