



Differential LVPECL Clock Oscillator

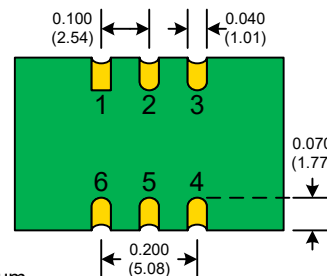
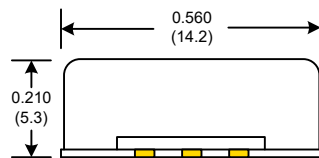
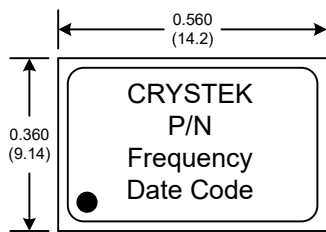


CCPD-912 Model 9x14 mm SMD, 3.3V, LVPECL

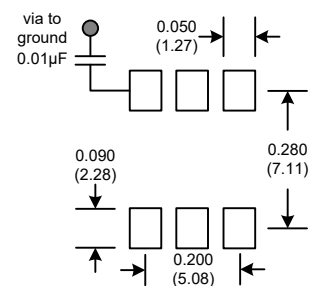
| | |
|-----------------------------|---|
| Frequency Range: | 77.760 MHz to 161.1328 MHz |
| Frequency Stability: | ±20ppm to ±100ppm |
| Temperature Range: | 0°C to 70°C |
| | (Option M) -20°C to 70°C |
| | (Option X) -40°C to 85°C |
| Storage: | -45°C to 90°C |
| Input Voltage: | 3.3V ± 0.3V |
| Input Current: | 55mA Typical, 88mA Max |
| Output: | Differential LVPECL |
| | Symmetry: 45/55% Max @ zero crossing point |
| | Rise/Fall Time: 1ns Max (20% to 80%) |
| | Logic: Terminated to Vdd-2V into 50 ohms |
| | Temp. 0°C to 85°C "0" = 1.490 Min, 1.680 Max |
| | Temp. -40°C to 0°C "1" = 2.275 Min, 2.420 Max |
| | "0" = 1.470 Min, 1.745 Max |
| | "1" = 2.215 Min, 2.420 Max |
| | Disable Time: 200ns Max |
| | Start-up Time: 1mSec Typical, 2mSec Max |
| Jitter: | 12kHz to 20MHz |
| | 0.45 pSec Typical @ 80 MHz, 1ps RMS Max |
| | 0.25 pSec Typical @ 160 MHz, 1ps RMS Max |
| Phase Noise: | 10Hz -65 dBc Typical |
| | 100Hz -98 dBc Typical |
| | 1kHz -125 dBc Typical |
| | 10kHz -140 dBc Typical |
| | 100kHz~100MHz -145 dBc Typical |
| Aging: | <3ppm 1 st year, <1ppm every year thereafter |



Designed to meet today's requirements for 3.3V Differential LVPECL applications. The CCPD-912 is a very low noise, low jitter clock oscillator for demanding telecom and other applications.

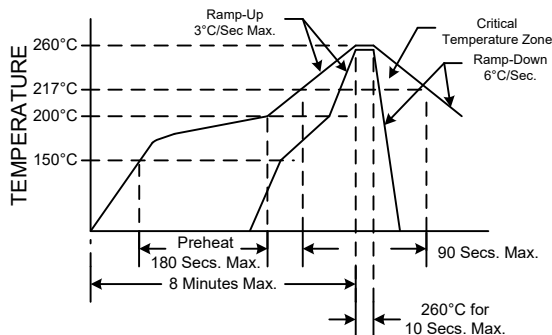


SUGGESTED PAD LAYOUT



PAD FINISH: Immersion Gold (ENIG); 5 micro inches maximum

RECOMMENDED REFLOW SOLDERING PROFILE



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

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

| Tri-State Function | |
|--------------------|------------|
| Function pin 1 | Output pin |
| Open | Active |
| "1" level 0.7V Min | Active |
| "0" level 0.3V Max | High Z |

Crystek Part Number Guide

CCPD-912 X - 25 - 155.520

#1 #2 #3 #4 #5

#1 Crystek SMD PECL Osc.
#2 Model 912 = 9x14mm smd 6pad 3.3V
#3 Temp. Range: Blank = 0/70°C, M= -20/70°C, X= -40/85°C
#4 Stability: (see Table 1)
#5 Frequency in MHz: 3 or 6 decimal places

Stability Indicator

| | |
|--------------------------|----------|
| Blank (std) | ± 100ppm |
| 50 | ± 50ppm |
| 25 | ± 25ppm |
| 20 ** | ± 20ppm |
| ** only available 0/70°C | |

Example:
CCPD-912X-25-155.520 = 3.3V, 45/55, -40/85°C, 25ppm, 155.520 MHz

Table 1

Specifications subject to change without notice.

Rev: J

Date: 19-Sep-2017

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