

CVHD-965 Model
9X14 mm SMD, 5V, CMOS

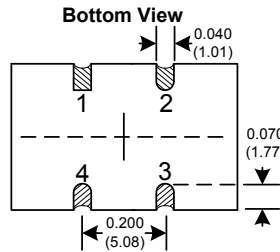
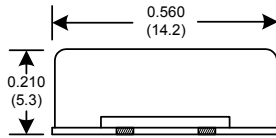
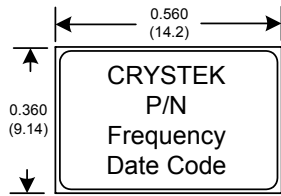
Frequency Range: 14MHz to 49.152MHz
Frequency Stability: ±30ppm
Frequency Pulling: (Blank) ±100ppm Min (Std)
 (Option A) ±150ppm Min
 (Option B) ±200ppm Min
Temperature Range: 0°C to 70°C
 (Option M) -20°C to 70°C
 (Option X) -40°C to 85°C
Storage: -55°C to 120°C
Input Voltage: 5V ±0.5V
Control Voltage: 2.5V ±2.0V
Input Current: 30mA Typ, 50mA Max
Output: CMOS
 Symmetry: 45/55% Max @ 50% Vdd
 Rise/Fall Time: 3ns Max @ 20% to 80% Vdd
 Linearity: ±10% Max
 Logic: "0" = 10% Vdd Max
 "1" = 90% Vdd Min
 Load: 30pF
Jitter: 12KHz to 80MHz 0.5psec Typ., 1psec RMS Max
Phase Noise Floor: -145dBc/hz Typ., -140dBc/hz Max Guaranteed
Sub-Harmonics: None
Aging: <3ppm 1st/yr, <1ppm every year thereafter



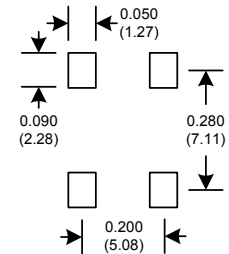
Low Jitter, High Pull Voltage Controlled Crystal Oscillator



Designed using fundamental UM-1 crystal to achieve Low Jitter and High Pull performance. Perfect for any application requiring high pull but extremely low jitter. Available in 3.3 Volt version, see CVHD-960 Model.



SUGGESTED PAD LAYOUT



Part Number Example:

CVHD-965(Temp)(Pull)-Freq.

CVHD-965-16.384 = 5V, 45/55, 0/70°C, 100ppm, 16.384 MHz

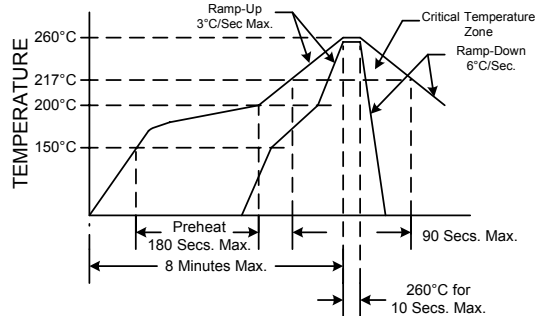
CVHD-965B-16.384 = 5V, 45/55, 0/70°C, 200ppm, 16.384 MHz

CVHD-965MA-16.384 = 5V, 45/55, -20/70°C, 150ppm, 16.384 MHz

CVHD-965XB-416.384 = 5V, 45/55, -40/85°C, 200ppm, 16.384 MHz

Pad	Connection
1	Volt Cont.
2	GND
3	OUT
4	Vdd

RECOMMENDED REFLOW SOLDERING PROFILE



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

Specifications subject to change without notice.

TD-030901 Rev. B



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