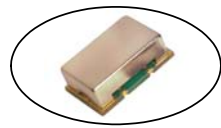


Ultra-Low Phase Noise Voltage Controlled Crystal Oscillator

CVHD-950 Model 9X14 mm SMD, 3.3V, CMOS

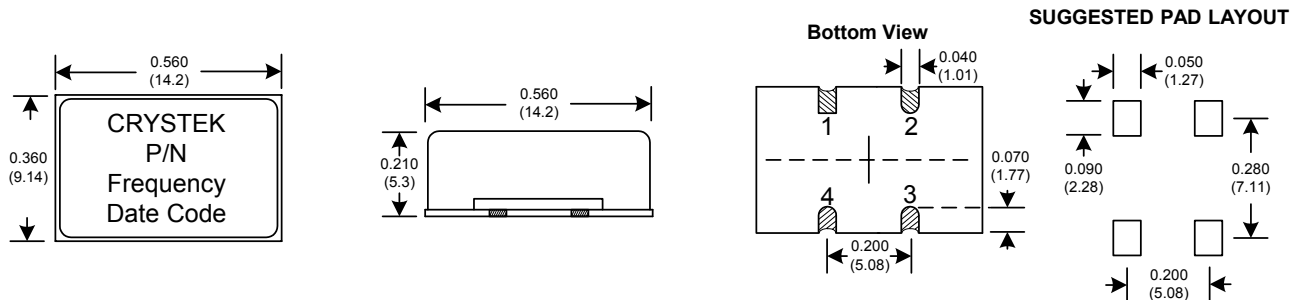


Frequency Range:	50MHz to 125MHz
Frequency Pulling:	±20ppm APR Min
Temperature Range:	0°C to 70°C
	(Option M) -20°C to 70°C
	(Option X) -40°C to 85°C
Storage:	-55°C to 120°C
Input Voltage:	3.3V ±0.3V
Control Voltage:	1.65V ±1.65V
Input Current:	15mA Typ, 25mA Max
Output:	CMOS
	Symmetry: 45/55% Max @ 50% Vdd
	Rise/Fall Time: 3ns Max @ 20% to 80% Vdd
	Linearity: ±10% Max
	Logic: "0" = 10% Vdd Max
	"1" = 90% Vdd Min
	Load: 15pF
	Output current: ±24mA Max
Jitter:	12KHz to 80MHz
	0.5psec Typ., 1psec RMS Max
Phase Noise Floor:	-160dBc Typ., -155dBc Max Guaranteed
Sub-Harmonics:	None
Aging:	<3ppm 1st/yr, <1ppm every year thereafter

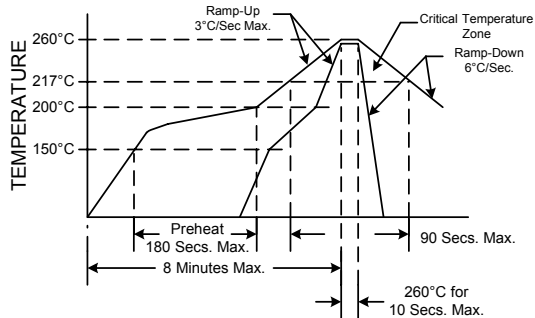
Designed using high Q 3rd overtone UM-1 crystal to achieve Ultra-Low Phase Noise. Perfect for any application requiring low pull but extremely low phase noise. Available in clock versions as well.

Part Number Example:

- CVHD-950-100.000** = 3.3V, 45/55, 0/70°C, 20ppm APR, 100.000 MHz
- CVHD-950M-100.000** = 3.3V, 45/55, -20/70°C, 20ppm APR, 100.000 MHz
- CVHD-950X-100.000** = 3.3V, 45/55, -40/85°C, 20ppm APR, 100.000 MHz



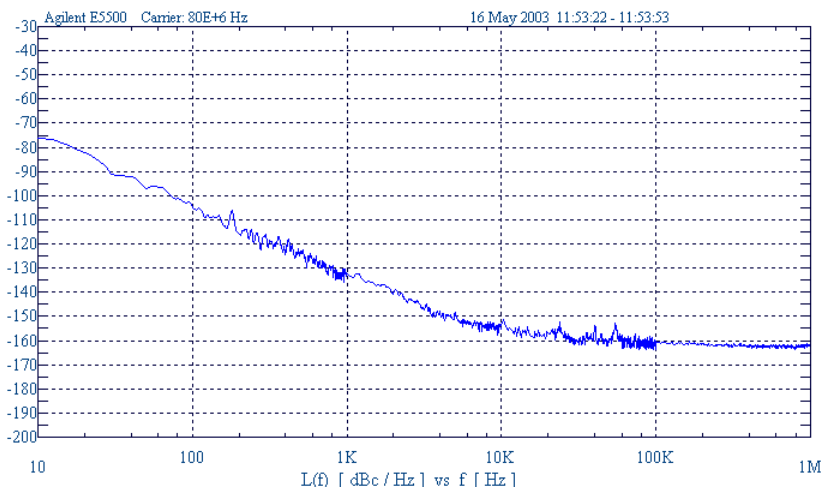
RECOMMENDED REFLOW SOLDERING PROFILE



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

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

80MHz Phase Noise Plot



** APR= Absolute Pulling Range inclusive of all conditions
Specifications subject to change without notice.

TD-030501 Rev. D



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