



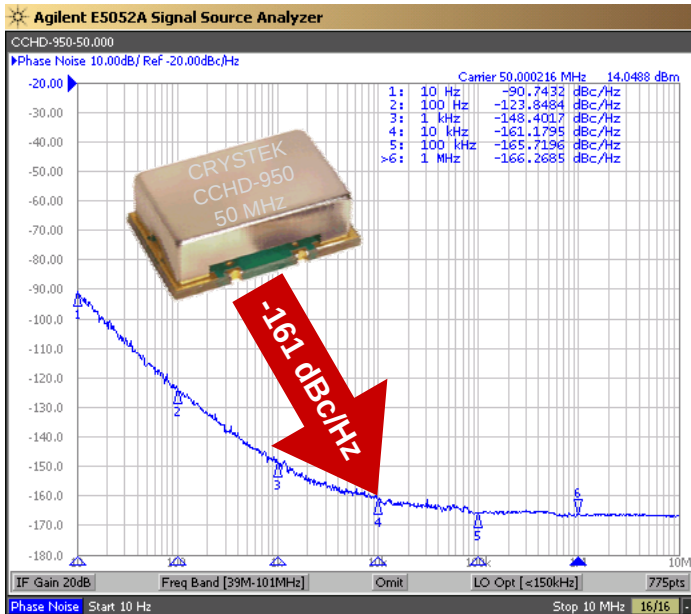
CRYSTEK
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CCHD-950 Model
9×14 mm SMD, 3.3V, CMOS

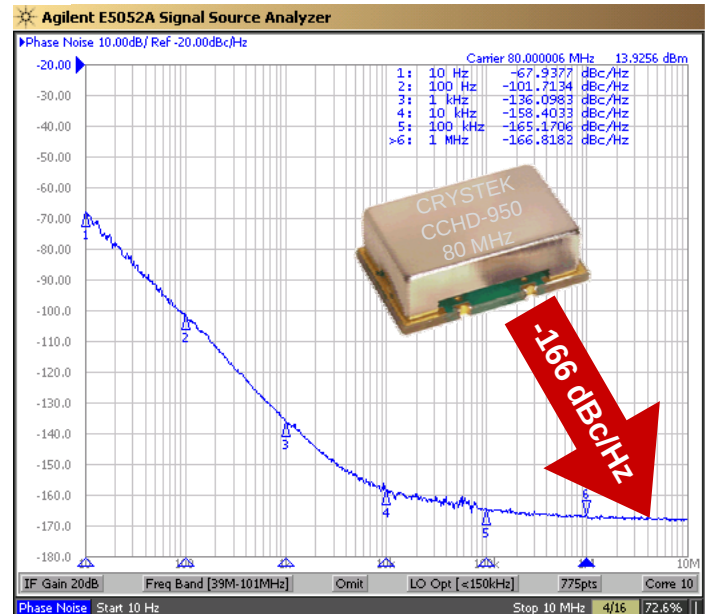


CCHD-950 Ultra-Low Phase Noise Oscillator

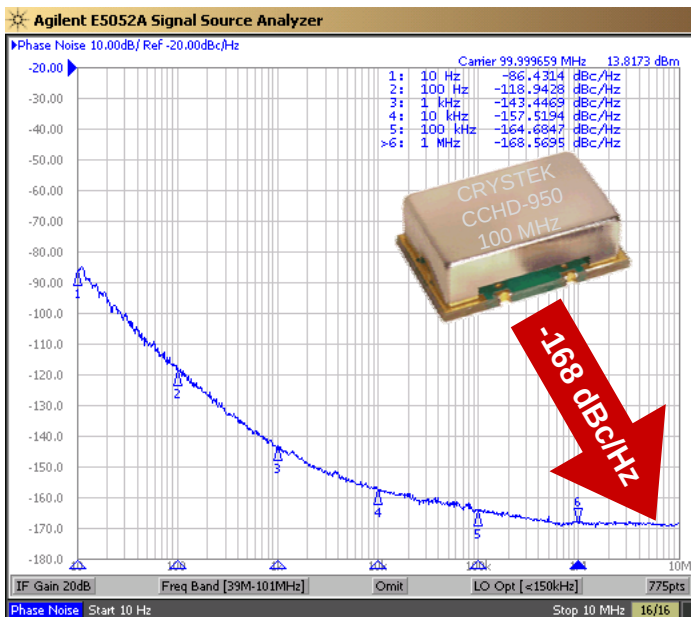
50MHz HCMOS 3.3V



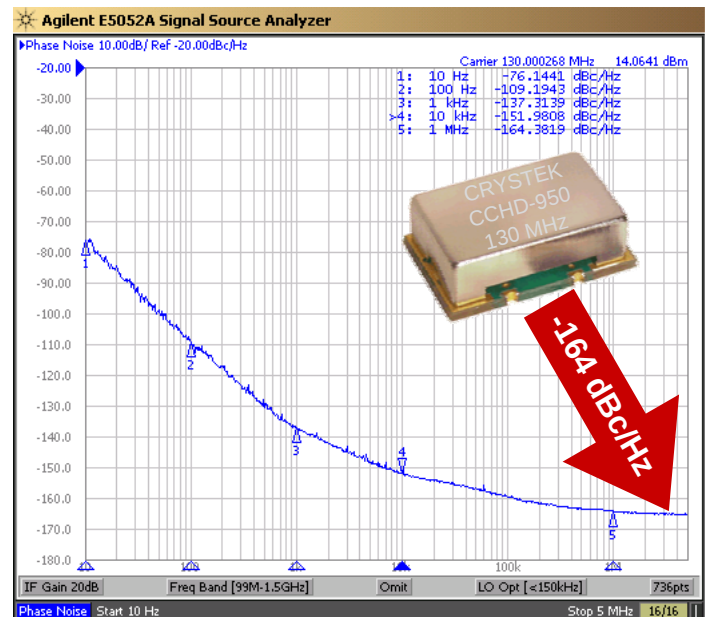
80MHz HCMOS 3.3V



100MHz HCMOS 3.3V



130MHz HCMOS 3.3V



Model CCHD-950 is a 50MHz to 130MHz CMOS Clock Oscillator. High Q crystal and 3rd overtone technology provides Ultra-Low Phase Noise and Low-Jitter performance with a CMOS output. Features include -165dBc/Hz phase noise floor with 3.3Vdc input voltage, -40°C to +85°C operating temperature, and 9×14 mm SMT package. The oscillator has no sub-harmonics.

**Applications include High Definition TV, Avionics
Low Phase Signal Sources, and Test and Measurement.**

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Date: 20-Dec-10
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CRYSTEK
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CCHD-950

Ultra-Low Phase Noise Oscillator



CCHD-950 Model
9×14 mm SMD, 3.3V, CMOS

Frequency Range:

Temperature Range:

(Option M)

(Option X)

Storage:

Input Voltage:

Input Current:

Output:

Symmetry:

Rise/Fall Time:

Logic:

50MHz to 130MHz

0°C to +70°C

-20°C to +70°C

-40°C to +85°C

-55°C to 90°C

3.3V ±0.3V

15mA Typ., 25mA Max

CMOS

45/55% Max @ 50%Vdd

3nsec Max @ 20% to 80% Vdd

"0" = 10% Vdd Max

"1" = 90% Vdd Min.

Load: 15pF

Output Current: ±24mA Max

0.5psec Typ., 1psec RMS Max

See plots

-165dBc Typ., -160dBc Max

None

<3ppm 1st/yr, <1ppm thereafter

Jitter: 12kHz~80MHz

Phase Noise Typical:

Phase Noise Floor:

Sub-harmonics:

Aging:

CCHD-950 Options:

Temperature Range:

0°C to +70°C (±20ppm, ±25ppm, ±50ppm)

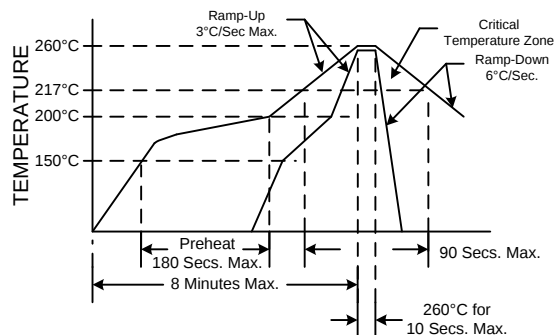
-20°C to +70°C (±25ppm, ±50ppm)

-40°C to +85°C (±25ppm, ±50ppm)

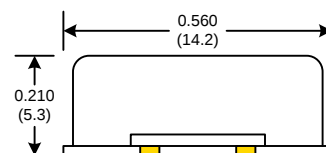
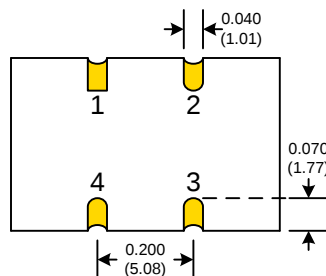
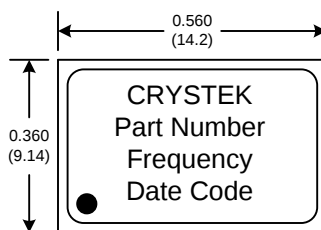
Part Number Example:

CCHD-950X-25-100.000 = 3.3V, 45/55, -40°C to +85°C (±25ppm), 100MHz

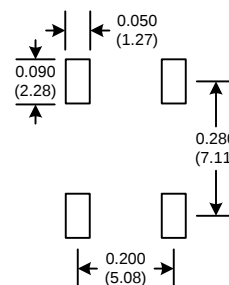
RECOMMENDED REFLOW SOLDERING PROFILE



Pad	Connection
1	NC
2	GND
3	OUT
4	Vdd



SUGGESTED PAD LAYOUT



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