Model CCHD-57518 is the industry’s lowest jitter clock oscillator in a 5×7.5 mm package at 1.8V. It features a typical phase jitter of 186 fSec RMS at 24 MHz. Close-in phase noise is -100 dBC/Hz @ 10 Hz while its floor is at -161 dBC/Hz. This oscillator may be small in size but it packs a punch inside. Its output driver is capable of driving ±24mA. This translates to a rise/fall time of ~1ns at 24 MHz with a 15pF load.

Applications include
DACs
ADCs
Low Phase Signal Sources
Test and Measurement
CCHD-57518 Model
5×7.5 mm SMD, 1.8V, HCMOS

Frequency Range: 20 MHz to 50 MHz
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: 1.8V ±5%
Input Current: 10mA Typical, 15mA Max
Output: HCMOS
Symmetry: 45/55% Max @ 50% Vdd
Rise/Fall Time: 2ns Max @ 20% to 80% Vdd
Logic: “0” = 10% Vdd Max
“1” = 90% Vdd Min
Load: 15pF
Phase Jitter: (12 kHz~5 MHz) 186 fs RMS Typical @ 24 MHz
Phase Noise Typical: See plot
Phase Noise Floor: -161 dBc/Hz Typical
Sub-harmonics: None
Aging: <3ppm 1st year, <1ppm thereafter

CCHD-57518 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-57518X-25-24.000 = 1.8V, 45/55, -40°C to +85°C (±25ppm), 24 MHz

Specifications subject to change without notice.

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