Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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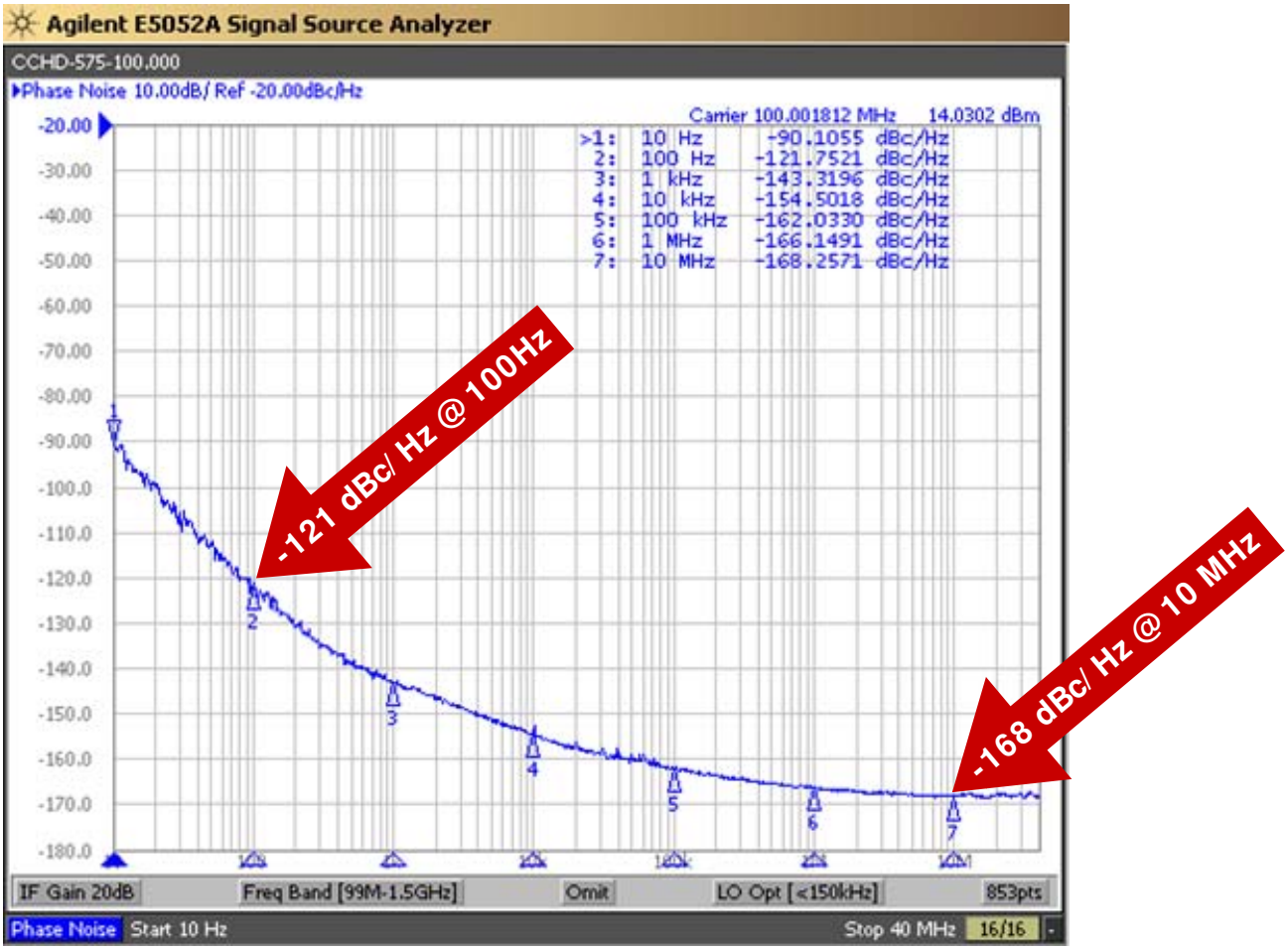
CRYSTEK CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CCHD-575 Model
5×7.5 mm SMD, 3.3V, HCMOS

RoHS Compliant

CCHD-575
Ultra-Low Phase Noise Oscillator



Model CCHD-575 is the industry's lowest jitter clock oscillator in a 5×7.5 mm package. It features a typical phase jitter of 82 fSec RMS at 100 MHz. Close-in phase noise is -90 dBc/Hz @ 10 Hz while its floor is at -168 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 ~600ps at 100 MHz with a 15pF load.

Applications include
DACs
ADCs
Low Phase Signal Sources
Test and Measurement

Rev: F
Date: 09-Jul-12
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CRYSTEK CORPORATION
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CRYSTEK CRYSTALS
A DIVISION OF CRYSTEK CORPORATION

CCHD-575
Ultra-Low Phase Noise Oscillator

CCHD-575 Model
5×7.5 mm SMD, 3.3V, HCMOS

RoHS Compliant

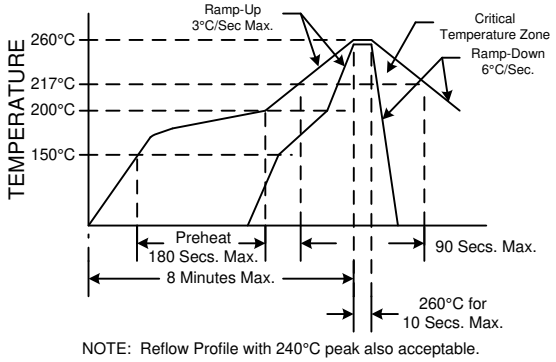
Frequency Range:	**50 MHz to 130 MHz***
Temperature Range:	**0°C to +70°C**
(Option M)	**-20°C to +70°C**
(Option X)	**-40°C to +85°C**
Storage:	**-45°C to 90°C**
Input Voltage:	**3.3V ±0.3V**
Input Current:	**15mA Typical, 25mA Max**
Output:	**HCMOS**
Symmetry:	**45/55% Max @ 50% Vdd**
Rise/Fall Time:	**2nsec Max @ 20% to 80% Vdd**
Logic:	**"0" = 10% Vdd Max**
	"1" = 90% Vdd Min
Load:	**15pF**
	Output Current: ±24mA Max
Phase Jitter: (12kHz~80MHz)	**82 fSec RMS Typical @ 100 MHz**
Phase Noise Typical:	**See plot**
Phase Noise Floor:	**-168 dBc/Hz Typical, -165 dBc/Hz Max**
Sub-harmonics:	**None**
Aging:	**<3ppm 1st year, <1ppm thereafter**

CCHD-575 Options:

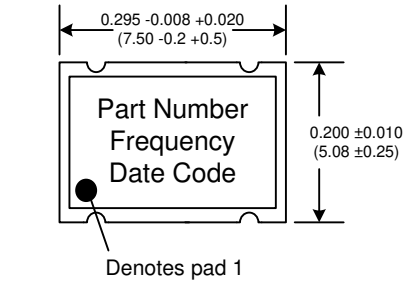
Temperature Range:	**0°C to +70°C (±20ppm, ±25ppm, ±50ppm)**
	-20°C to +70°C (±25ppm, ±50ppm)
	-40°C to +85°C (±25ppm, ±50ppm)

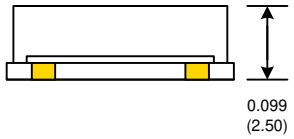
Part Number Example:
CCHD-575X-25-100.000 = 3.3V, 45/55, -40°C to +85°C (±25ppm), 100 MHz

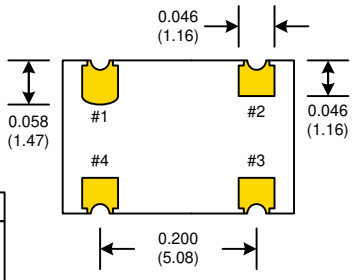
RECOMMENDED REFLOW SOLDERING PROFILE



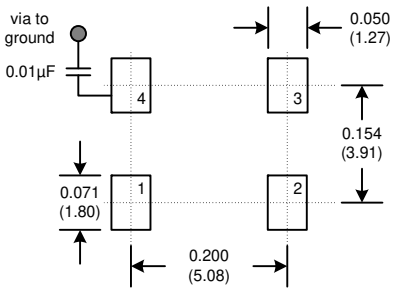
NOTE: Reflow Profile with 240°C peak also acceptable.







SUGGESTED PAD LAYOUT



*Standard Frequencies (MHz)
80.000
100.000
125.000

Pad	Connection
1	NC
2	GND
3	Output
4	Vdd

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