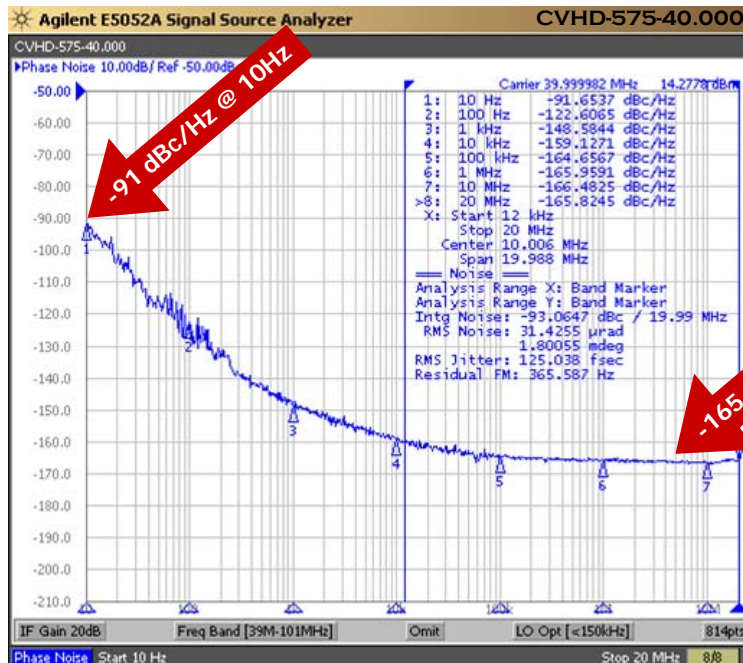
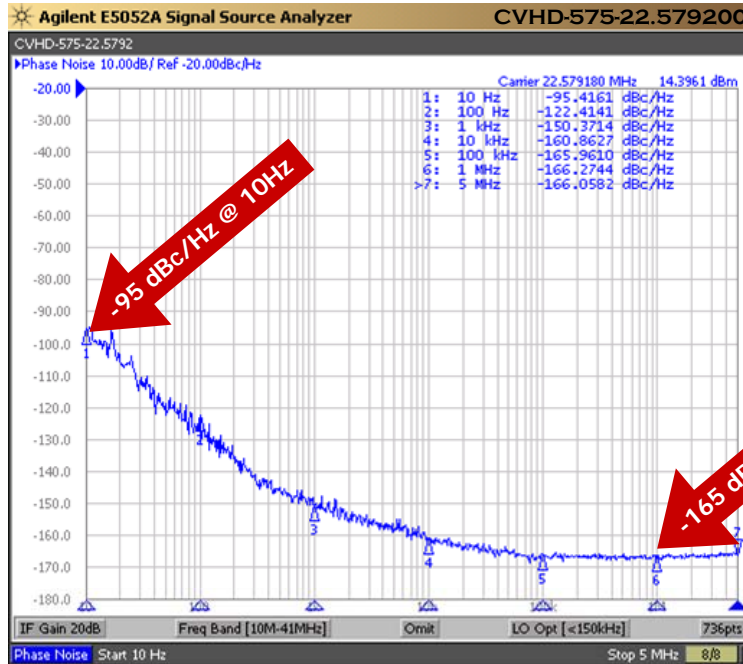


**CVHD-575 Model**  
5x7.5 mm SMD, 3.3V, HCMOS



Model CVHD-575 is the industry's lowest phase noise VCXO in a 5x7.5 mm package. Close-in phase noise is -90 dBc/Hz @ 10 Hz while its floor is at -165 dBc/Hz. This oscillator may be small in size but it packs a punch inside. Its output driver is capable of driving  $\pm 24$ mA.

Applications include  
Digital Video, DACs, ADCs for HD Audio,  
Low Phase Signal Sources, Test and Measurement

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# CVHD-575

## Ultra-Low Phase Noise

### VCXO



### CVHD-575 Model

5x7.5 mm SMD, 3.3V, HCMOS

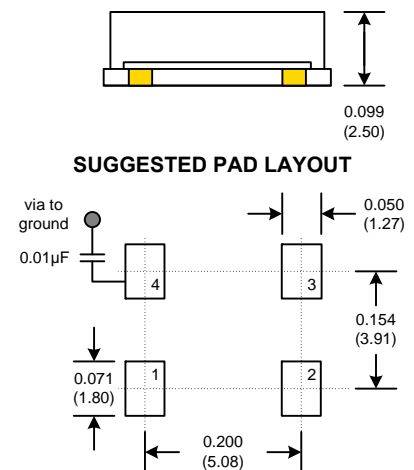
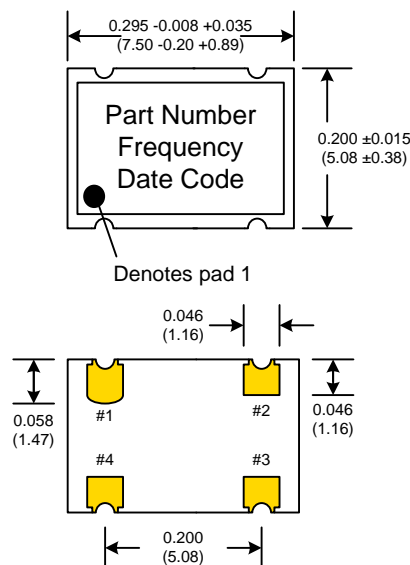
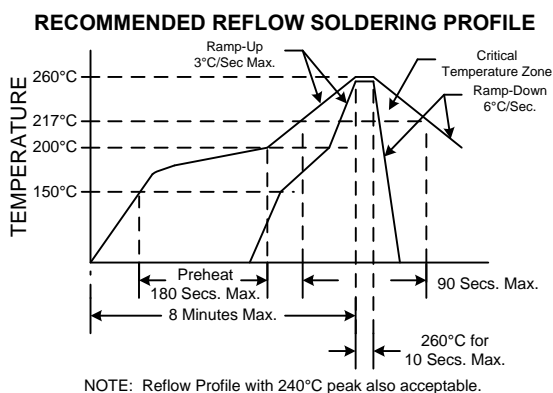
<b>Frequency Range:</b>	<b>20 MHz to 52 MHz*</b>
<b>Temperature Range:</b>	<b>0°C to +70°C (standard)</b>
(Option M)	<b>-20°C to +70°C</b>
(Option X)	<b>-40°C to +85°C</b>
<b>Storage:</b>	<b>-45°C to 90°C</b>
<b>Input Voltage:</b>	<b>3.3V ±0.3V</b>
<b>Input Current:</b>	<b>15mA Typical, 25mA Max</b>
<b>Output:</b>	<b>HCMOS</b>
<b>Symmetry:</b>	<b>45/55% Max @ zero crossing point</b>
<b>Rise/Fall Time:</b>	<b>2nsec Max @ 20% to 80% Vdd</b>
<b>Logic:</b>	<b>“0” = 10% Vdd Max</b>
	<b>“1” = 90% Vdd Min</b>
<b>Load:</b>	<b>15pF</b>
<b>Output Current:</b>	<b>±24mA Max</b>
<b>Input:</b>	
<b>Modulation Bandwidth:</b>	<b>&gt;10kHz @ -3dB</b>
<b>Input Impedance:</b>	<b>51 kΩ</b>
<b>Control Voltage:</b>	<b>1.65V ±1.65V</b>
<b>Tuning Sensitivity:</b>	<b>+22ppm/V Typical</b>
<b>Frequency Pulling:</b>	<b>±20ppm APR Min</b>
	<b>(Inclusive of frequency stability, calibration, and aging.)</b>
<b>Linearity:</b>	<b>±10% Max</b>
<b>Phase Jitter: (12kHz~20MHz)</b>	<b>125fs Typical @ 40 MHz</b>
<b>Phase Noise Typical:</b>	<b>See plot</b>
<b>Phase Noise Floor:</b>	<b>-165 dBc/Hz Typical, -162 dBc/Hz Max</b>
<b>Sub-harmonics:</b>	<b>None</b>
<b>Aging:</b>	<b>&lt;3ppm 1<sup>st</sup> year, &lt;1ppm thereafter</b>



*Standard Frequencies (MHz)	
22.579200	45.158400
24.576	49.152
27.000	50.000
40.000	

**Part Number Example:**  
CVHD-575X-50.000 = 3.3V, 45/55, -40°C to +85°C, 50 MHz

Absolute Maximum Ratings		
Parameter	Rating	Unit
Input Supply Voltage	+6.0	V
Input Control Voltage	+10.0	V



Pad	Connection
1	Vc
2	GND
3	Output
4	Vdd

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