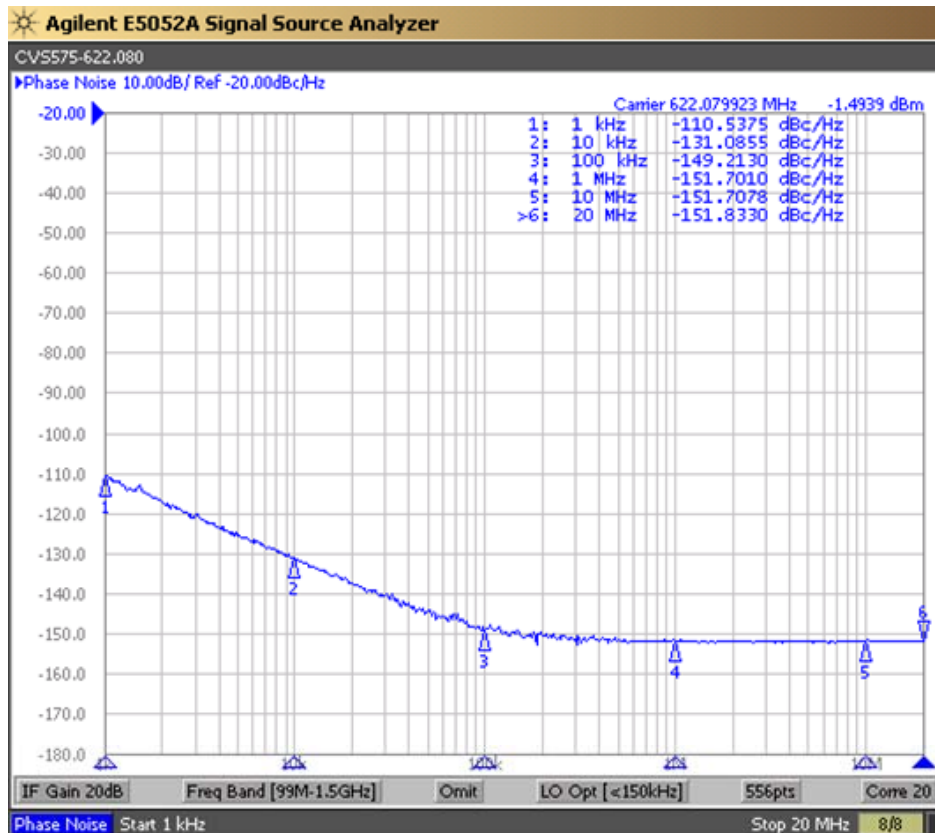




CVS575
Voltage Controlled SAW Oscillator
3.3V LVPECL
5×7.5mm SMD



Model CVS575 is a SAW(surface acoustic wave) based Voltage Controlled Oscillator (VCISO) designed for High Performance PLLs. It is an ideal choice for Telecommunication applications needing to meet Low Jitter generation requirements.

It is housed in the industry standard 5×7.5×2.5mm SMD package. The Enable/Disable function was designed to be used with CMOS logic levels for ease of interfacing. It is not necessary to convert to LVPECL logic to turn the Output ON and OFF.

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CVS575

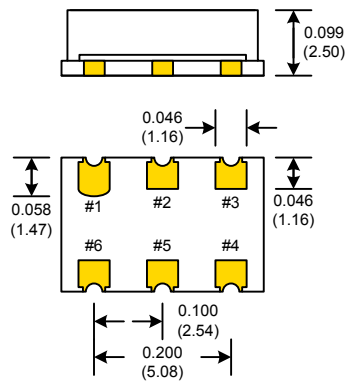
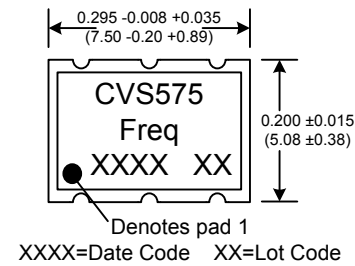
Voltage Controlled SAW Oscillator

3.3V LVPECL

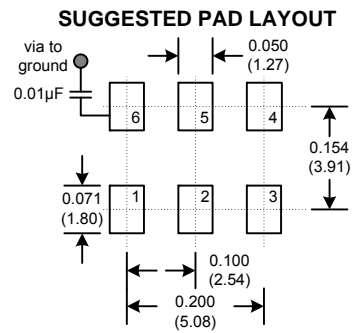
5x7.5mm SMD



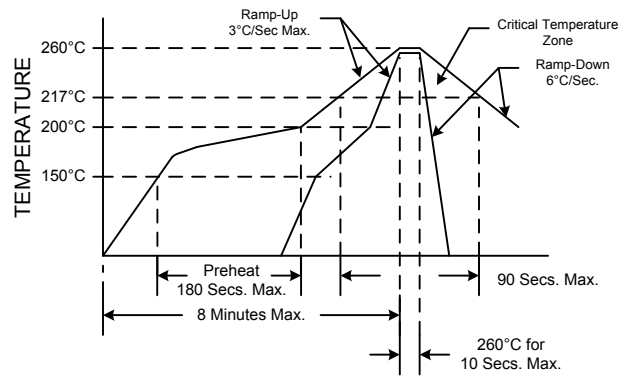
| Performance Specification | MIN | TYP | MAX | UNITS |
|--|-------|--------------|-----------------|--------------------|
| Nominal Frequency: <i>Customer Specified</i> | 315 | | 1000 | MHz |
| Absolute Pulling Range: | ±50 | | | ppm |
| Frequency Stability: | | ±150 | | ppm |
| Linearity: | | ±15 | | % |
| Tuning Sensitivity, Kv: | | +275 | | ppm/V |
| Output Phase Noise: (622.08 MHz) | | | | |
| @1kHz Offset | | -110 | | dBc/Hz |
| @10kHz Offset | | -130 | | dBc/Hz |
| @100kHz Offset | | -149 | | dBc/Hz |
| @1MHz Offset | | -150 | | dBc/Hz |
| @10MHz Offset | | -151 | | dBc/Hz |
| Jitter: 12kHz-20MHz SONET OC-48 (12kHz~20MHz) SONET OC-192 (50kHz~80MHz) | | 0.18 0.12 | | pS, RMS pS, RMS |
| Rise/Fall Times, tr/tf 20-80% | 100 | | 240 | pS |
| Output High Voltage, V _{OH} | 2.215 | | 2.420 | V |
| Output Low Voltage, V _{OL} | 1.470 | | 1.745 | V |
| Enable High Voltage, V _{IH} | 2.0 | | V _{CC} | V |
| Disable Low Voltage, V _{IL} | GND | | 0.8 | V |
| Enable High Current, I _{IH} | | | +150 | uA |
| Disable Low Current, I _{IL} | | | -150 | uA |
| Duty Cycle: | 45 | 50 | 55 | % |
| Supply Voltage: | 3.0 | 3.3 | 3.6 | V |
| Supply Current, I _{CC} : | | 82 | | mA |
| Control Voltage: | 0 | | 3.3 | V |
| Input Impedance: | | 100 | | kΩ |
| Input Modulation: | | 500 | | kHz |
| Operating Temperature: | -20 | | +70 | °C |
| Storage Temperature: | -45 | | +90 | °C |



| Pad | Connection |
|-----|------------|
| 1 | Volt Cntrl |
| 2 | E/D |
| 3 | GND |
| 4 | OUT |
| 5 | COUT |
| 6 | Vdd |



RECOMMENDED REFLOW SOLDERING PROFILE



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

| Parameter | Conditions |
|------------------------|--------------------------|
| Mechanical Shock | MIL-STD-883, Method 2002 |
| Mechanical Vibration | MIL-STD-883, Method 2007 |
| Solderability | MIL-STD-883, Method 2003 |
| Resistance to Solvents | MIL-STD-883, Method 2015 |

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