

Model CVS575S-500 is a 500 MHz voltage-controlled SAW (surface acoustic wave) oscillator (VCISO). SAW crystal technology provides low-noise and low-jitter performance with true sinewave output. Features include -135 dBc/Hz phase noise at 10 kHz offset, 3.3 V input voltage, 0°C to +70°C operating temperature, and 5×7.5 mm SMT package. The oscillator has no sub-harmonic and the second harmonic is typically -14 dBc.

Applications include PLL frequency translation, test and measurement, avionics, point-to-point radios, and multi-point radios.

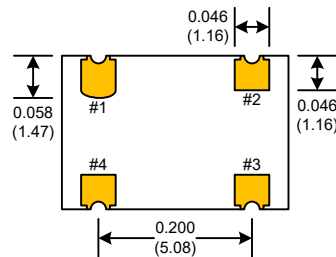
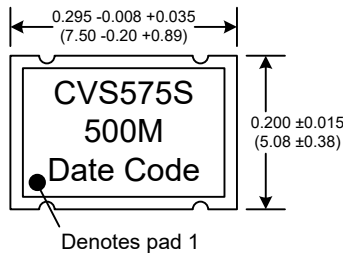
CVS575S-500.000
SineWave
SAW Based VCSO
5×7.5mm SMD
3.3 Volts



Frequency: 500 MHz
Operating Temperature Range: 0°C to 70°C
CVS575SX-500.000 option: -40°C to 85°C
Storage Temperature Range: -45°C to 90°C
Input Voltage: 3.3V ±0.15V
Control Voltage Range: 0V to 3.3V
Settability At Nominal (25°C): 0.5V to 2.0V
Freq. vs Temperature: +100ppm, -150ppm Typical
Input Current: 20mA Typical, 25mA Max



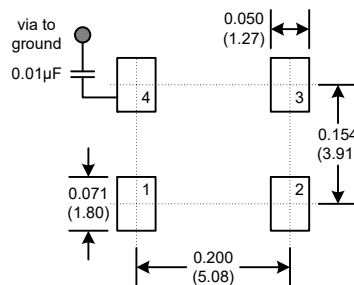
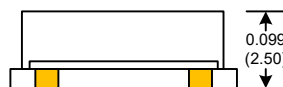
Output: SineWave
Pullability APR: ±50ppm Min
Linearity: ±20% Max
Output Power: +7dBm Min into 50 Ω Load
Start-up time: 2ms Typical, 10ms Max
2nd Harmonic: -14dBc Typical, -10dBc Max
Sub-harmonics: None
Modulation BW: >20 kHz @ -3dB
Phase Jitter: 12 kHz~80 MHz <1ps RMS (1-sigma) Max



PIN	Function
1	Volt Control
2	GND
3	OUT
4	Vdd

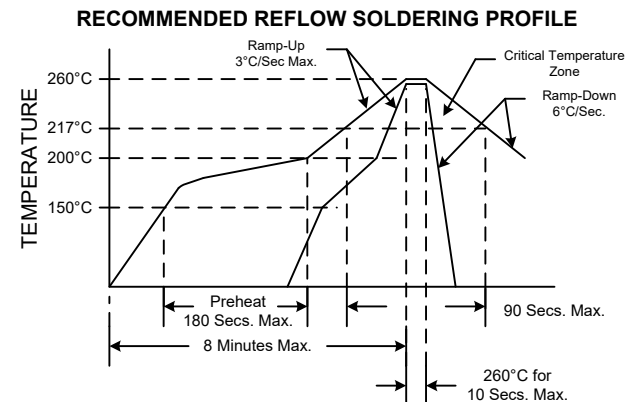
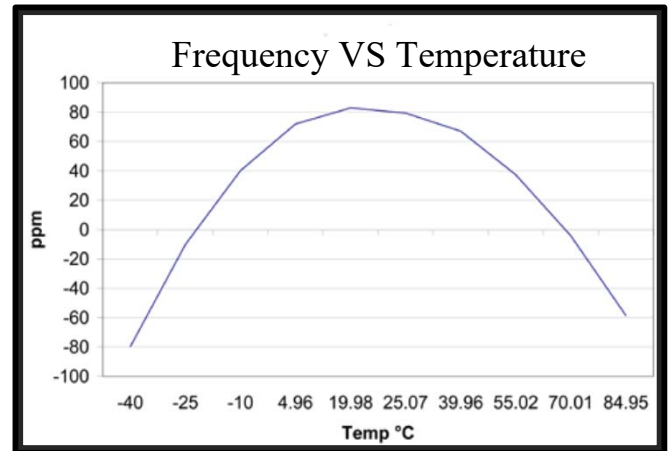
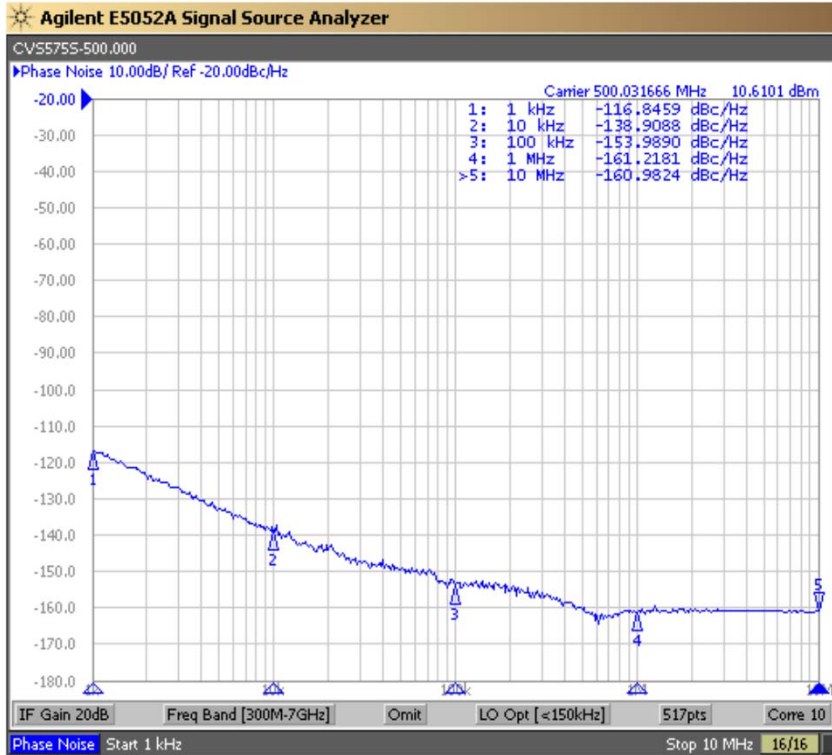
PAD FINISH: Immersion Gold (ENIG); 5 micro inches maximum

SUGGESTED PAD LAYOUT



Dimensions inches (mm)
All dimensions are Max unless otherwise specified.

Rev: N
Date: 14-Feb-2022
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NOTE: Reflow Profile with 240°C peak also acceptable.

Parameter	Conditions
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Mechanical Vibration	MIL-STD-883, Method 2007, Condition A
Solderability	MIL-STD-883, Method 2003
Resistance to Solvents	MIL-STD-202, Method 215
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition I or J
Thermal Shock	MIL-STD-883, Method 1011, Condition A
Moisture Resistance	MIL-STD-883, Method 1004

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