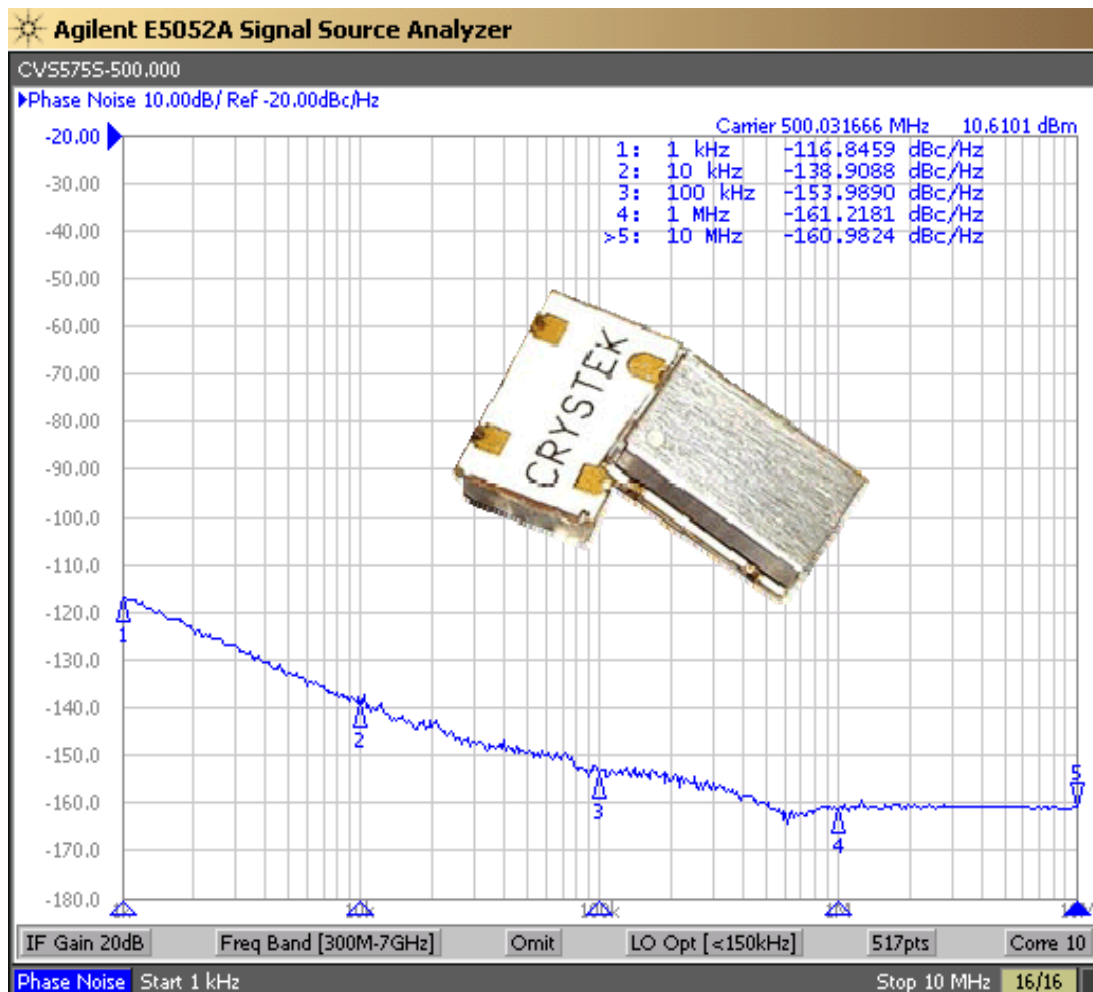


CVS575S-500.000
True SineWave
SAW Based VCSO
5×7.5mm SMD
3.3 Volts



Model CVS575S-500 is a 500 MHz voltage-controlled SAW (surface acoustic wave) oscillator (VCSO). 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, -20°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.

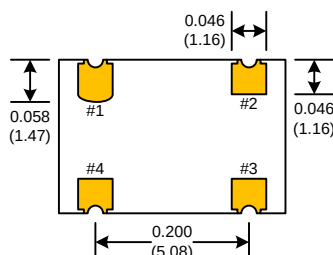
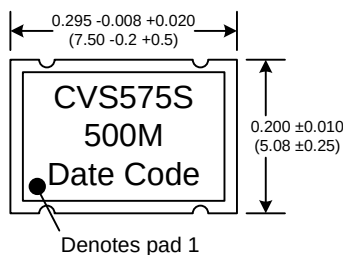
Applications include PLL frequency translation, test and measurement, avionics, point-to-point radios, and multi-point radios.

Rev: E
Date: 13-Nov-2013
Page 1 of 3

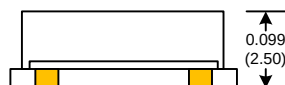
CVS575S-500.000
True SineWave
SAW Based VCSO
5×7.5mm SMD
3.3 Volts



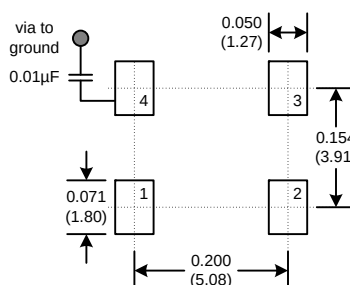
Frequency:	500 MHz
Temperature Range:	-20°C to 70°C
Storage:	-40°C to 90°C
Input Voltage:	3.3V ±0.15V
Control Voltage Range:	0V to 3.3V
Settability At Nominal (25°C):	1.5V ±0.5V
Freq. vs Temperature:	+100ppm, -150ppm Typical
Input Current:	20mA Typical, 25mA Max
Output:	True SineWave
Pullability APR:	±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:	>20kHz @ -3dB
Phase Jitter: 12kHz~80MHz	<1ps RMS (1-sigma) Max



PIN	Function
1	Volt Control
2	GND
3	OUT
4	Vdd



SUGGESTED PAD LAYOUT



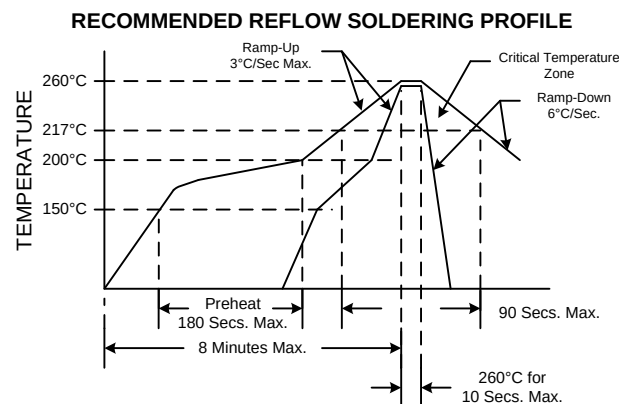
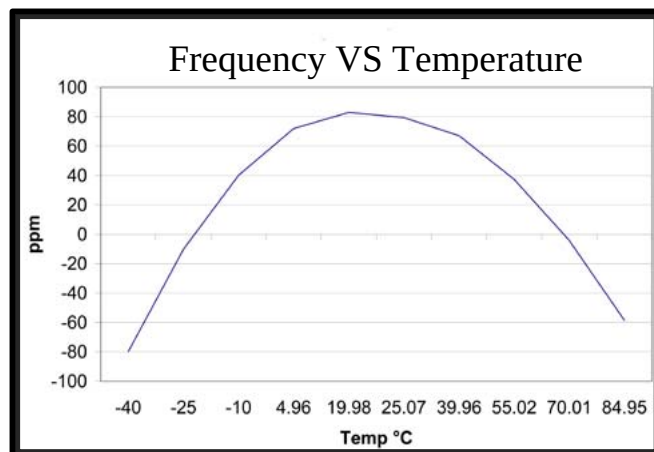
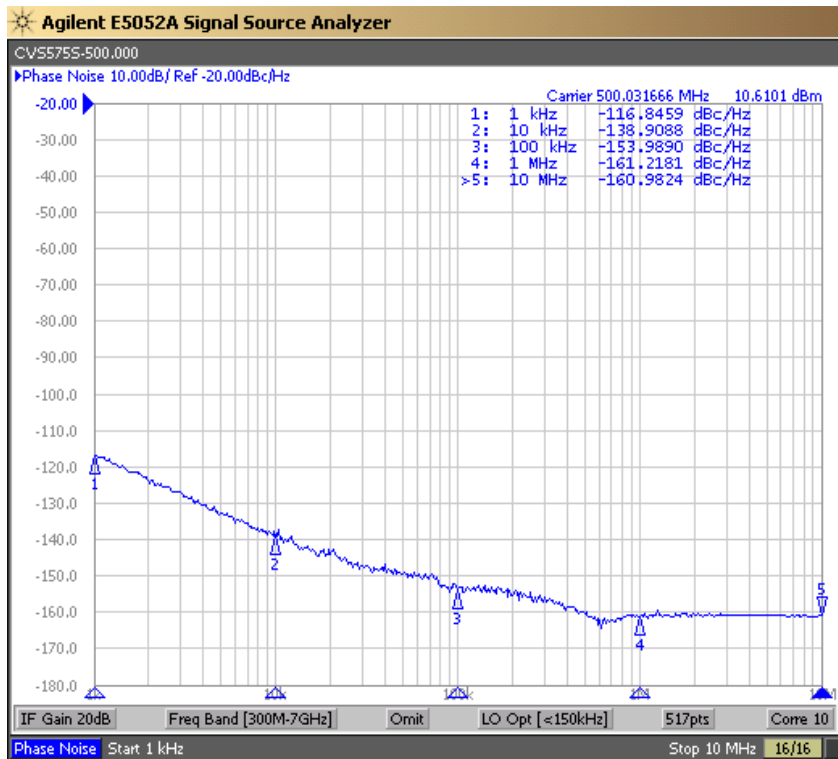
Dimensions inches (mm)
All dimensions are Max unless otherwise specified.

Rev: E
Date: 13-Nov-2013
Page 2 of 3



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



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

Rev: E
Date: 13-Nov-2013
Page 3 of 3



CRYSTEK
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