



CRYSTEK
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Ultra Low Noise SineWave Clock Oscillator

CCSS-945 Model

9×14 mm SMD, 5.0V, SineWave

Frequency Range:
Frequency Stability Options(ppm)
Temperature Range:
(Option M)
(Option X)

Storage:

Input Voltage:
Input Current:

Output:

Output Power:
Start-up time:
Load:

2nd Harmonic:
Sub-harmonics:

Phase Noise Typical:
(@100MHz)

10Hz
100Hz
1kHz
10kHz
100kHz
1MHz

10 MHz to 125 MHz
±20, ±25, ±50
(standard) 0°C to 70°C
-20°C to +70°C
-40°C to +85°C
-45°C to +90°C

5.0V ± 0.5V
30mA Max

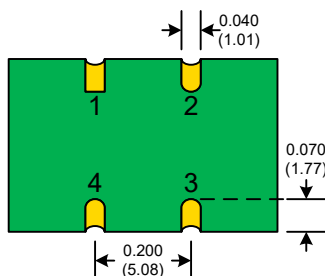
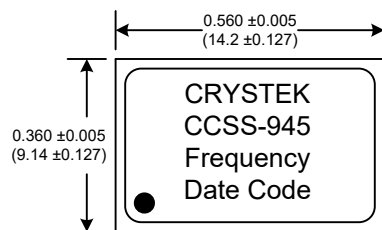
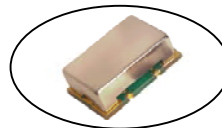
True SineWave
+5 dBm Min, +7 dBm Typical
2ms Typical, 5ms Max
50 ohms

-25 dBc Typical
None

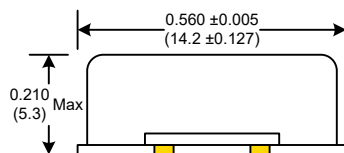
-85 dBc/Hz
-120 dBc/Hz
-145 dBc/Hz
-162 dBc/Hz
-170 dBc/Hz
-170 dBc/Hz

Aging:

<3ppm 1st year, <1ppm every year thereafter

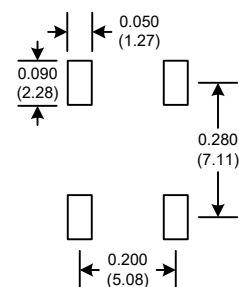


PAD FINISH: Immersion Gold (ENIG); 5 micro inches maximum



Pad	Connection
1	NC
2	GND
3	OUT
4	Vdd

SUGGESTED PAD LAYOUT



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Crystek Part Number Guide

CCSS - 945 X - 25 - 125.000

#1 #2 #3 #4 #5

#1 Crystek 9×14 SMD SineWave Clock
#2 Model 945 = Ultra Low Noise 5.0V
#3 Temp Range: Blank = 0/70°C, M = -20/70°C, X = -40/85°C
#4 Stability: (see Table 1)
#5 Frequency in MHz: 3 or 6 decimal places

Example:

CCSS-945X-25-100.000

5.0V, -40/85°C, ±25ppm, 100.000 MHz

Stability Indicator

Blank ± 100ppm
50 ± 50ppm
25 ± 25ppm
20* ± 20ppm

*not available in -40/85

Table 1

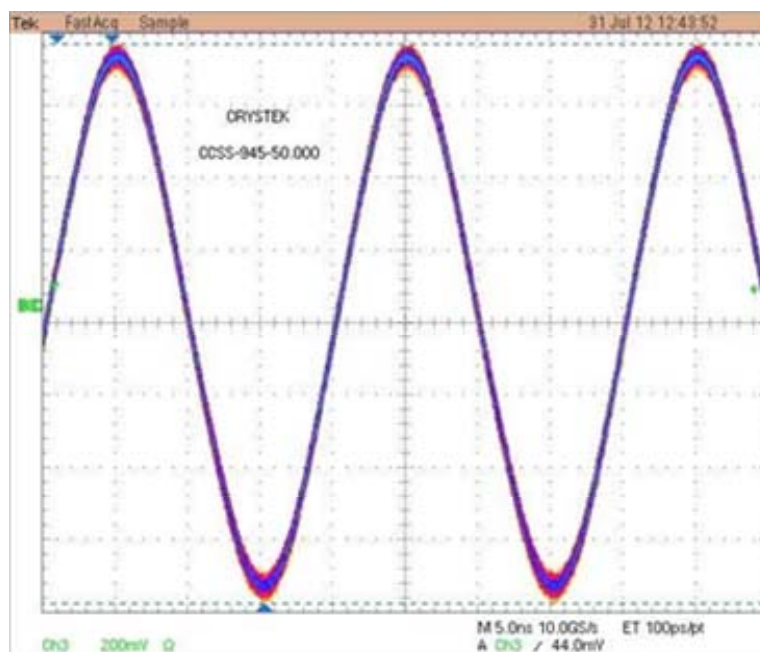
Standard Frequencies MHz

10.000
50.000
80.000
100.000
122.880
125.000

RECOMMENDED REFLOW SOLDERING PROFILE

900034 (See App Note listed on website)

<http://www.crystek.com/specification/reflow/900034.pdf>



Mechanical:

Shock:

MIL-STD-883, Method 2002, Condition B

Solderability:

MIL-STD-883, Method 2003

Vibration:

MIL-STD-883, Method 2007, Condition A

Solvent Resistance:

MIL-STD-202, Method 215

Resistance to Soldering Heat:

MIL-STD-202, Method 210, Condition I or J

Environmental:

Thermal Shock:

MIL-STD-883, Method 1011, Condition A

Moisture Resistance:

MIL-STD-883, Method 1004

Packaging:

Tape/Reel:

100ea, 250ea, 500ea 24mm Tape

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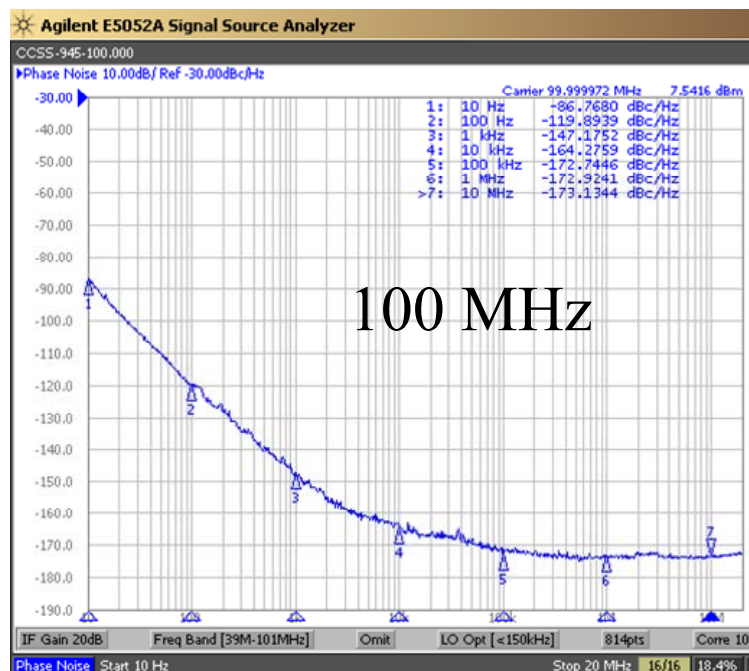
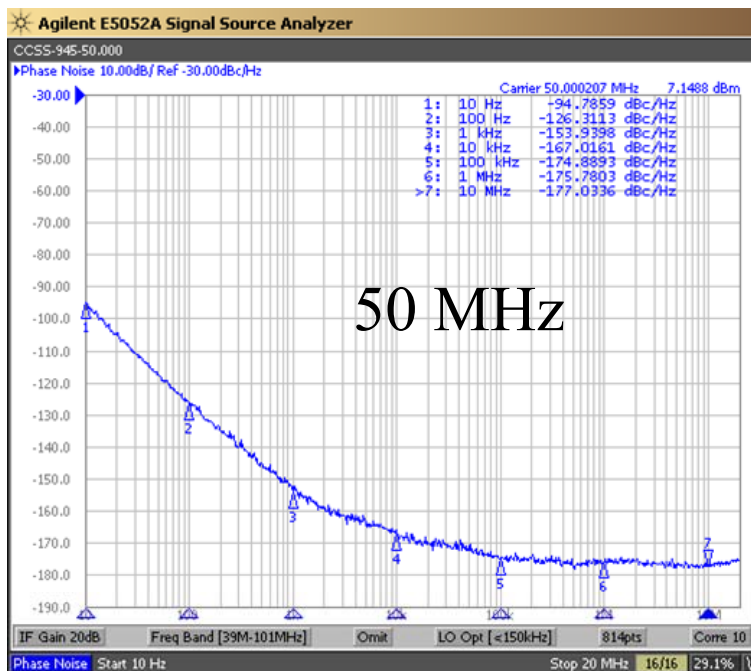
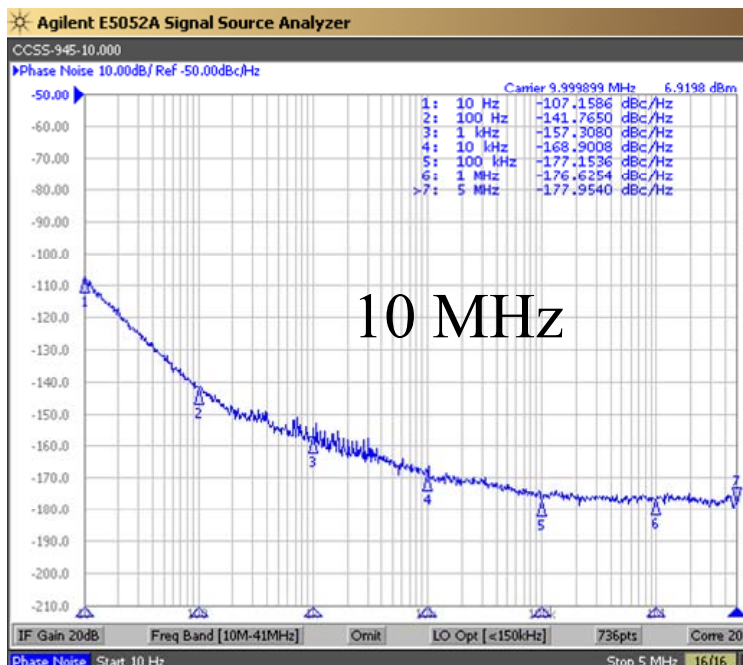




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