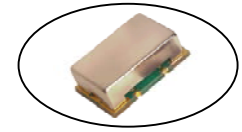




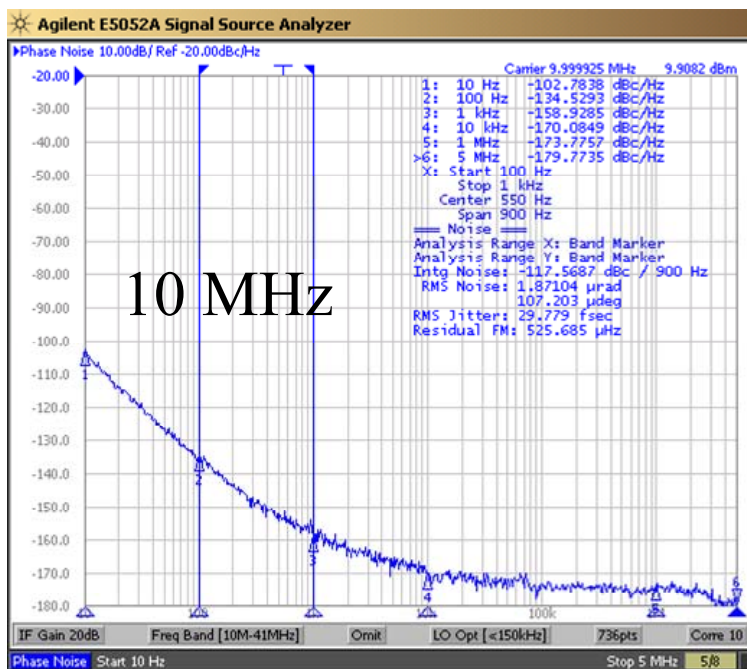
**THE DATASHEET OF  
CVSS-945X-100.000**



## CVSS-945 Model 9×14 mm SMD, 5.0V, SineWave



<b>Frequency Range:</b>	10 MHz to 125 MHz
<b>Temperature Range:</b>	0°C to 70°C
(Option X)	-40°C to 85°C
<b>Storage:</b>	-45°C to 90°C
<b>Input Voltage:</b>	5.0V ± 0.5V
<b>Control Voltage:</b>	2.5V ± 2.5V
<b>Settability At Nominal:</b>	2.5V ± 0.5V
<b>Tuning Sensitivity (Kv):</b>	+25 ppm/V Typical (Positive Slope)
<b>Input Current:</b>	35mA Max
<b>Output:</b>	True SineWave
Pullability APR:	±20ppm Min
Linearity:	±10% Max
Output Power:	+5 dBm Min, +7 dBm Typical
Start-up time:	2ms Typical, 5ms Max
Load:	50 Ω
<b>2nd Harmonic:</b>	-25 dBc Typical
<b>Sub-harmonics:</b>	None
<b>Modulation BW:</b>	>10kHz @ -3dB
<b>Phase Noise Typical:</b>	
(@100MHz)	
10Hz	-85 dBc/Hz
100Hz	-120 dBc/Hz
1kHz	-145 dBc/Hz
10kHz	-168 dBc/Hz
100kHz	-175 dBc/Hz
1MHz	-175 dBc/Hz
<b>Aging:</b>	<3ppm 1 <sup>st</sup> year, <1ppm every year thereafter

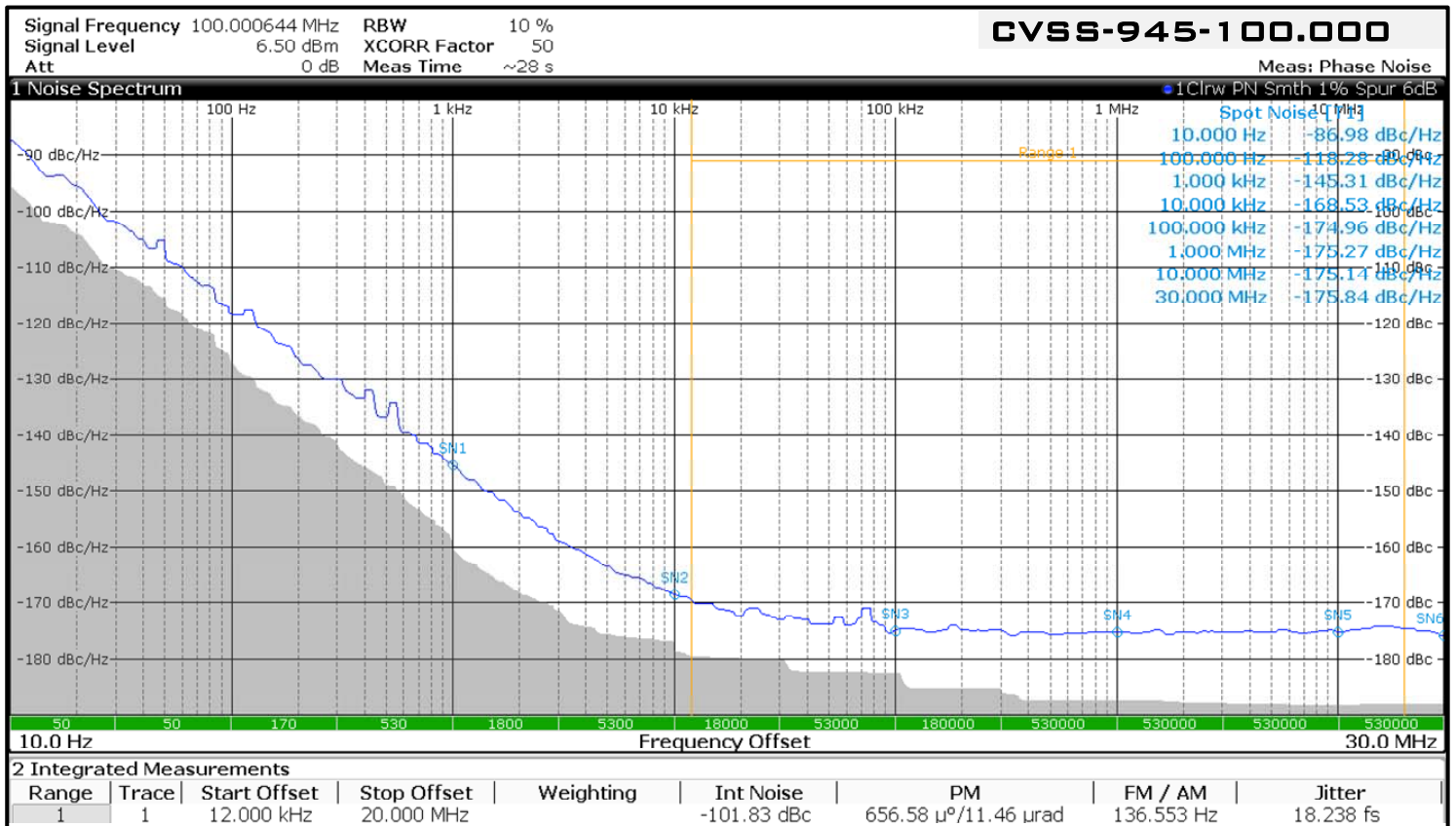
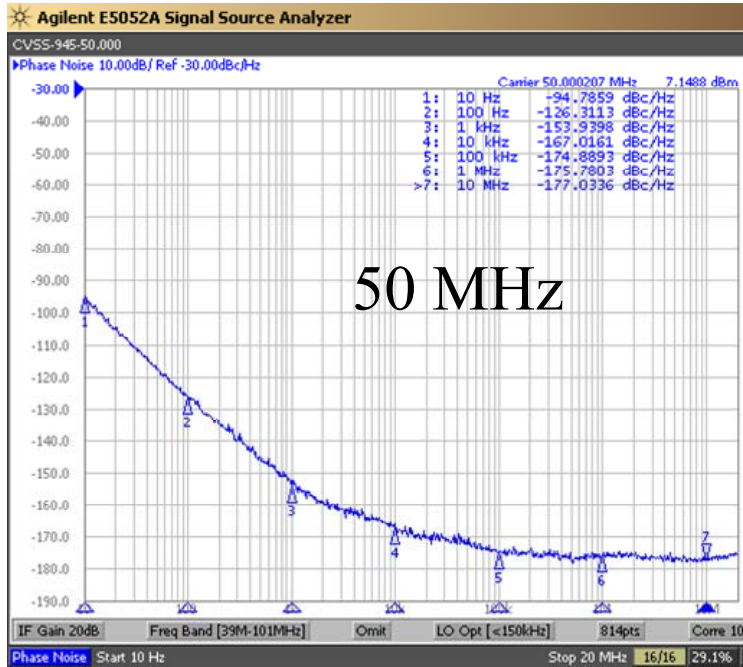


Absolute Maximum Ratings		
Parameter	Rating	Unit
Input Supply Voltage	+6.0	V
Input Control Voltage	+10.0	V

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**CVSS-945 Model**  
9x14 mm SMD, 5.0V, SineWave



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# Ultra-Low Phase Noise SineWave VCXO

**CVSS-945 Model**  
9×14 mm SMD, 5.0V, SineWave

## Crystek Part Number Guide

**CVSS-945 X L -125.000**

#1 #2 #3 #4 #5

#1 Crystek 9×14 SMD SineWave VCXO  
#2 Model 945 = Ultra Low Noise 5.0V  
#3 Temp. Range: Blank = 0/70°C, X = -40/85°C  
#4 Height: Blank = 0.210", L = 0.135"  
#5 Frequency in MHz: 3 or 6 decimal places

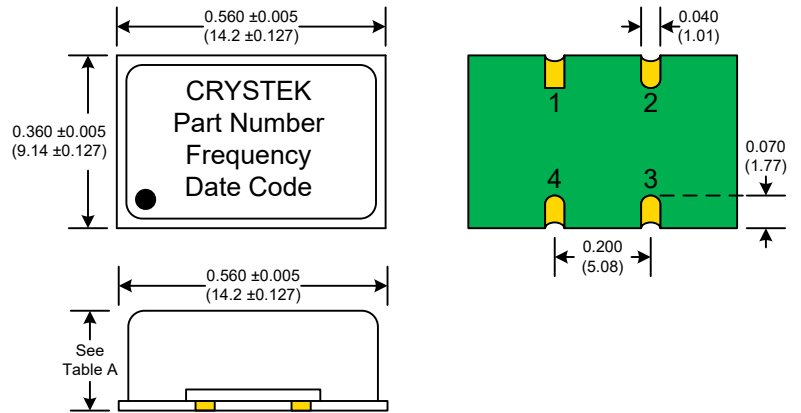
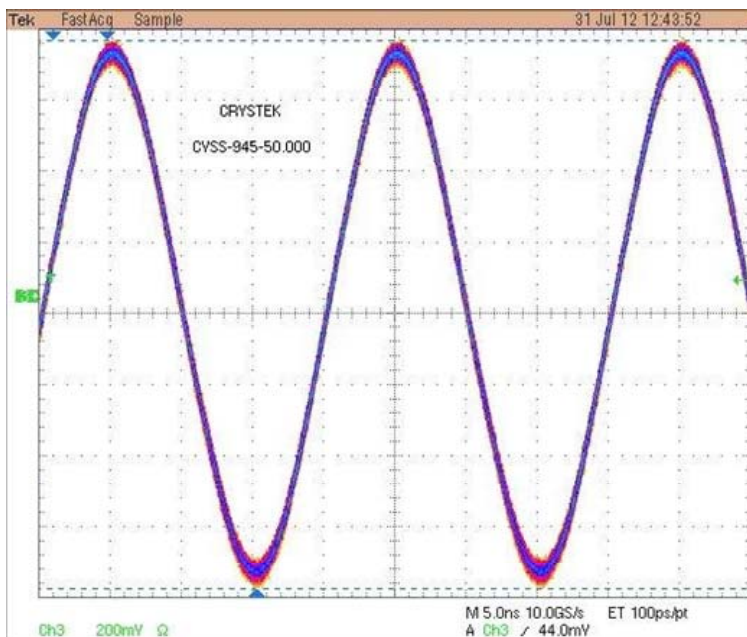
Example:  
CVSS-945X-125.000 = 5.0V, -40/85°C, 125.000 MHz

### Package Height Options (Max)

	inches	mm
Standard	0.210	5.33
Option L*	0.135	3.43

Table A

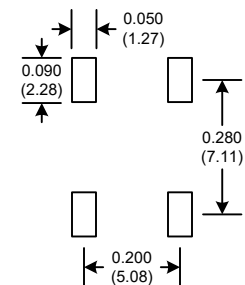
\* Option L available for certain frequencies below 54 MHz. Consult with factory.



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

### SUGGESTED PAD LAYOUT

Pad	Connection
1	Volt Cont.
2	GND
3	OUT
4	Vdd



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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## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View CVSS-945X-100.000 on WIN SOURCE](#)
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## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management