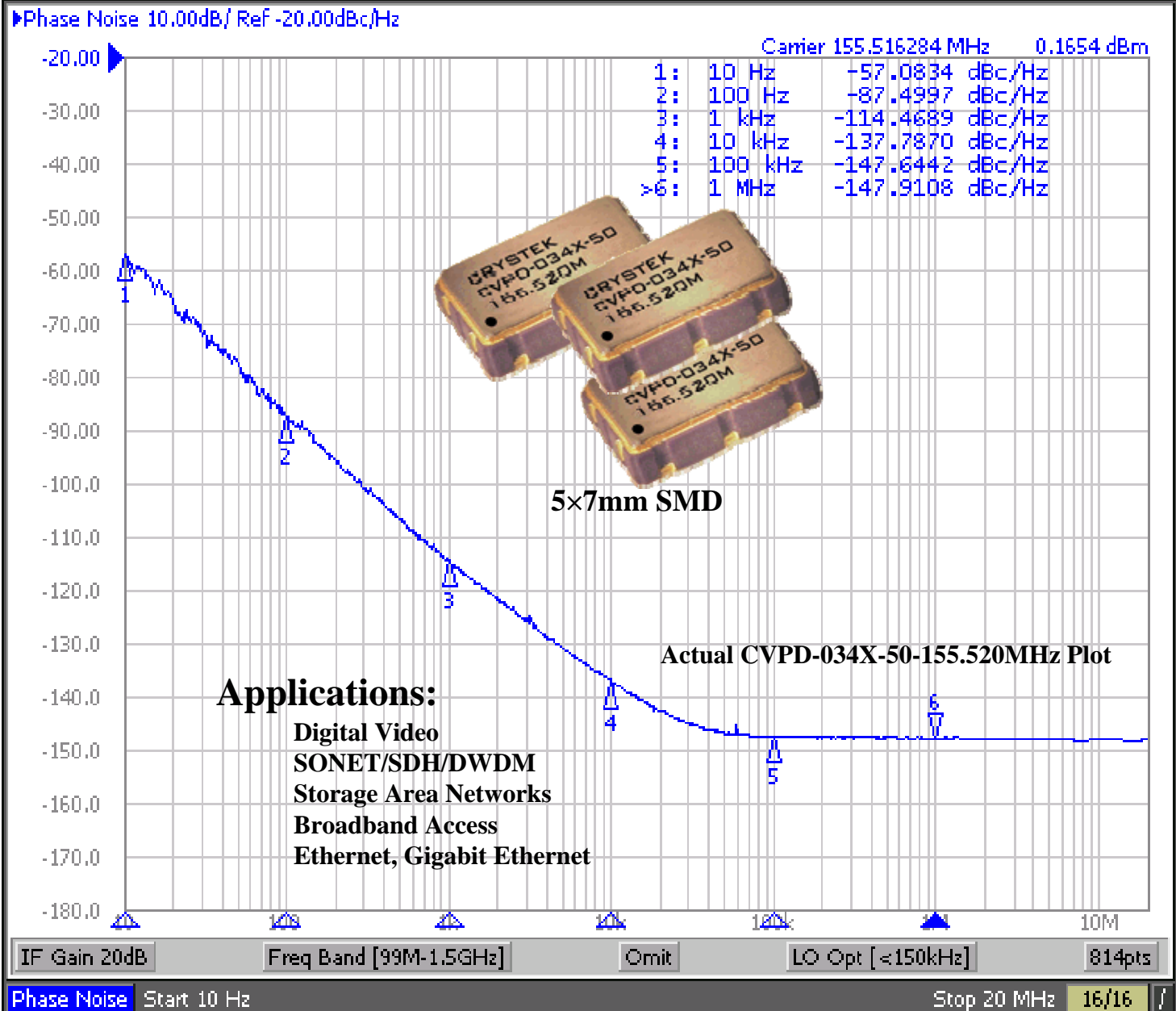




Agilent E5052A Signal Source Analyzer



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<b>Frequency Range:</b>	<b>77.760MHz to 200.000MHz</b>
<b>Frequency Pulling (APR*) Min.:</b>	<b>±50ppm</b>
<b>Temperature Range: (standard)</b>	<b>0°C to +70°C</b>
<b>(Option M)</b>	<b>-20°C to +70°C</b>
<b>(Option X)</b>	<b>-40°C to +85°C</b>
<b>Storage:</b>	<b>-45°C to 90°C</b>
<b>Input Voltage:</b>	<b>3.3V ± 0.3V</b>
<b>Control Voltage:</b>	<b>1.65V ±1.65V</b>
<b>Input Current:</b>	<b>55mA Typ., 88mA Max</b>
<b>Output:</b>	<b>Differential LVPECL</b>
<b>Symmetry:</b>	<b>45/55% Max @ 50% Vdd</b>
<b>Rise/Fall Time:</b>	<b>1nsec Max @ 20% to 80% Vdd</b>
<b>Linearity:</b>	<b>±10% Max</b>
<b>Logic: Terminated to Vdd-2V into 50 Ω</b>	
Temp. 0°C to 85°C	<b>“0”=1.490 Min., 1.680 Max</b>
	<b>“1”=2.275 Min., 2.420 Max</b>
Temp. -40°C to 0°C	<b>“0”=1.470 Min., 1.745 Max</b>
	<b>“1”=2.215 Min., 2.420 Max</b>
<b>Disable Time:</b>	<b>200nSec Max</b>
<b>Enable Time:</b>	<b>1mSec Typ., 2mSec Max</b>
<b>Phase Jitter: 12kHz~80MHz</b>	<b>0.5psec Typ., 1psec RMS Max</b>
<b>Phase Noise: 10Hz</b>	<b>-60dBc/Hz Typical</b>
<b>100Hz</b>	<b>-90dBc/Hz Typical</b>
<b>1kHz</b>	<b>-115dBc/Hz Typical</b>
<b>10kHz</b>	<b>-140dBc/Hz Typical</b>
<b>100kHz</b>	<b>-145dBc/Hz Typical</b>
<b>Sub-harmonics:</b>	<b>None</b>
<b>Aging:</b>	<b>&lt;5ppm 1<sup>st</sup> year, &lt;2ppm every year thereafter</b>

\* Inclusive of calibration, frequency stability, and aging

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**Crystek Part Number Guide**

**CVPD - 034 X - 50 - 155.520**

#1 #2 #3 #4 #5

#1 Crystek PECL VCXO  
#2 Model 034  
#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

**Stability Indicator**

Blank (std) ± 100ppm  
50 ± 50ppm

Table 1

**Example:**

CVPD-034X-50-155.520  
3.3V, -40/85°C, ±50ppm (APR), 155.520 MHz

**Standard Frequencies**

(±50ppm, 0/70°C)  
77.760MHz  
155.520MHz  
156.250MHz  
161.132800MHz  
200.000MHz

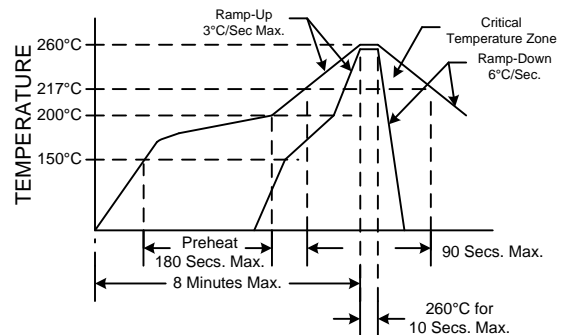
**Mechanical:**

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

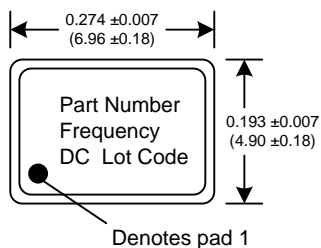
**Environmental:**

Thermal Shock: MIL-STD-883, Method 1011, Condition A  
Moisture Resistance: MIL-STD-883, Method 1004

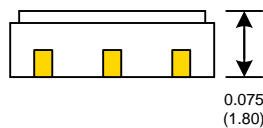
**RECOMMENDED REFLOW SOLDERING PROFILE**



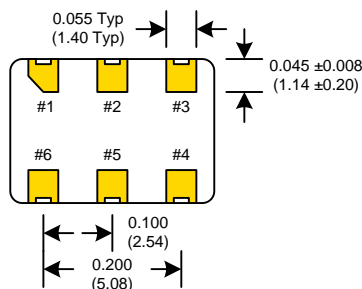
NOTE: Reflow Profile with 240°C peak also acceptable.



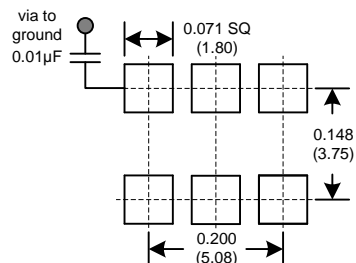
Dimensions inches (mm)  
All dimensions are Max unless otherwise specified.



Tristate Function	
Function pin 1	Output pin
Open or N/C	Active
"1" level 0.7xVdd Min	Active
"0" level 0.3xVdd Max	High Z



**SUGGESTED PAD LAYOUT**



PIN	Connection
1	Volt Control
2	Enable/Disable
3	GND
4	Output
5	Comp Output
6	Vcc

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