

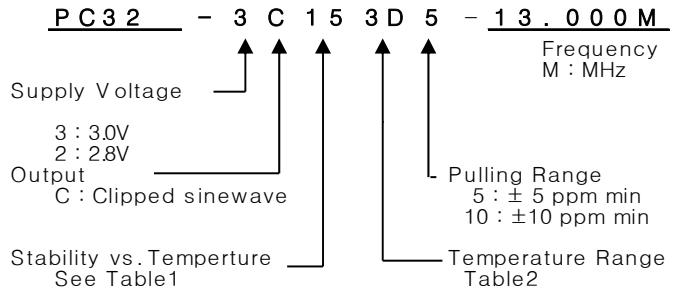
VCTCXO

PC32 Series

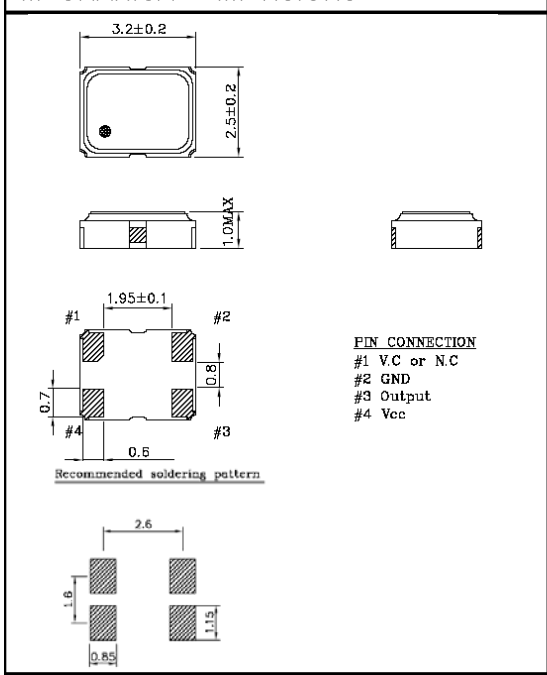
Clipped sinewave

4PAD SMD PACKAGE

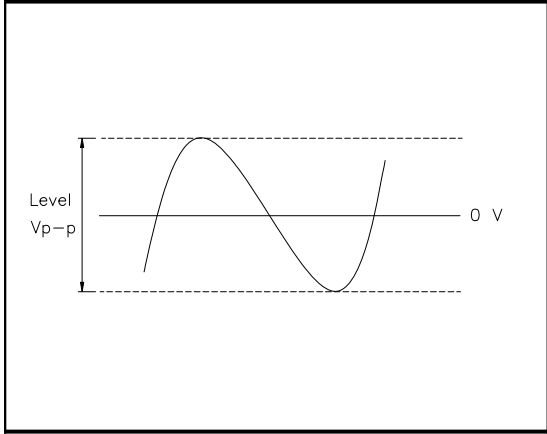
* PART NUMBERING GUIDE



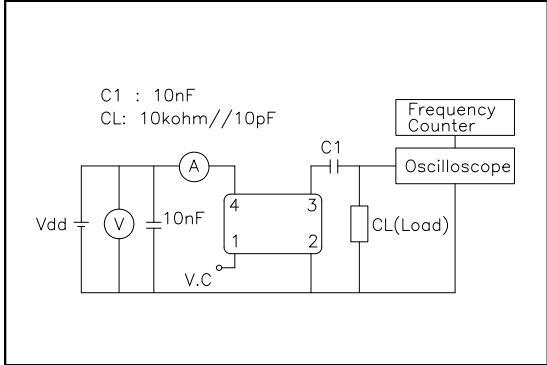
MECHANICAL DIMENSIONS



OUTPUT WAVEFORM



TEST CIRCUIT



ELECTRICAL SPECIFICATION

Frequency range	10.000MHz to 52.000MHz
Frequency tolerance	± 2.0 ppm at 25deg, 24hours after Reflow
Frequency Stability vs. Temperature	± 0.5 ppm to ± 2.5 ppm
vs. Supply Voltage	± 0.3 ppm max / $V_{dd} \pm 5\%$
vs. Load	± 0.2 ppm max / $15\text{pF} \pm 10\%$
vs. Aging	± 1.0 ppm max/ year
Temperature Range	
Operating	See Table 2
Storage	-55°C to 125°C
Supply Voltage	2.8V ~3.3V ($\pm 5\%$)
Input Current	2.0~3.0mA 10.000MHz to 52.000MHz
Output characteristics	Level 0.8Vp-p min
Clipped sinewave	Load 10k Ω //10pF
Phase Noise (typical)	-80 dBc / Hz @ 10Hz -110 dBc / Hz @ 100Hz -135 dBc / Hz @ 1KHz -140 dBc / Hz @ 10KHz -145 dBc / Hz @100KHz
Voltage Control Characteristics	
Output Pulling Range	± 5.0 ppm or ± 10 ppm min
Control Voltage Range	$1.5\text{V} \pm 1.0\text{V}$ ($V_{dd} : 3.0\text{V}$)

ENVIROMENTAL & MECHANICAL SPECIFICATION

Shock	MIL-STD-883C, Method 2002, Condition B
Vibration	MIL-STD-883C, Method 2007, Condition A
Solderability	MIL-STD-883C, Method 2003
Seal integrity	MIL-STD-883C, Method 1014, Condition C & A2
Marking	MIL-STD-202F, Method 215

Symbol	Stability
05	± 0.5 ppm
10	± 1.0 ppm
15	± 1.5 ppm
20	± 2.0 ppm
25	± 2.5 ppm

Symbol	Temp.	Symbol	Temp.
0	0 $^{\circ}\text{C}$	A	50 $^{\circ}\text{C}$
1	-10 $^{\circ}\text{C}$	B	60 $^{\circ}\text{C}$
2	-20 $^{\circ}\text{C}$	C	70 $^{\circ}\text{C}$
3	-30 $^{\circ}\text{C}$	D	75 $^{\circ}\text{C}$
4	-40 $^{\circ}\text{C}$	E	80 $^{\circ}\text{C}$
		F	85 $^{\circ}\text{C}$