

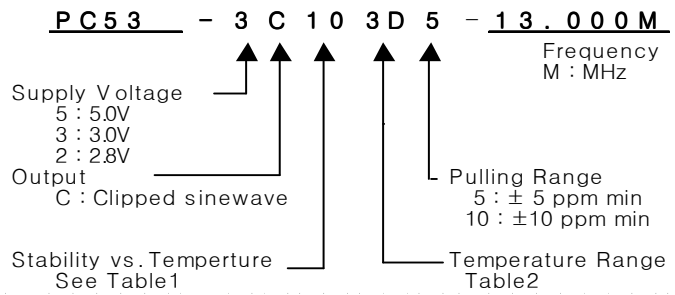
VCTCXO

PC53 Series

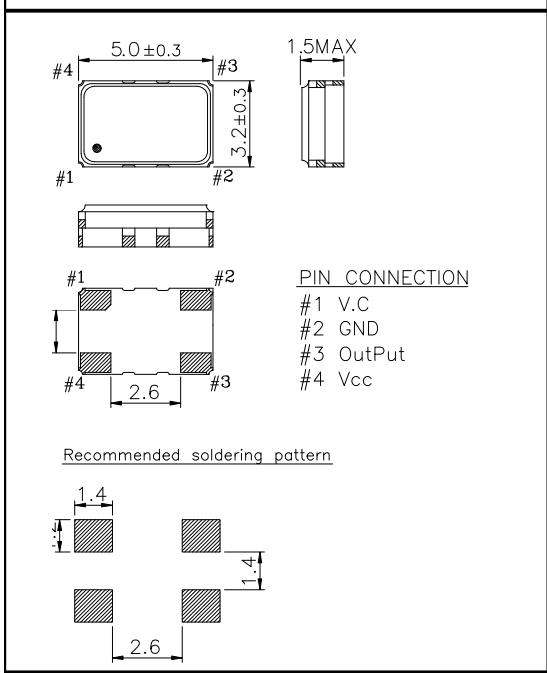
Clipped sinewave

4PAD SMD PACKAGE

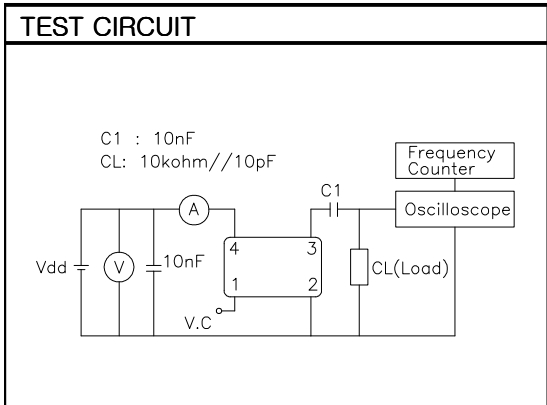
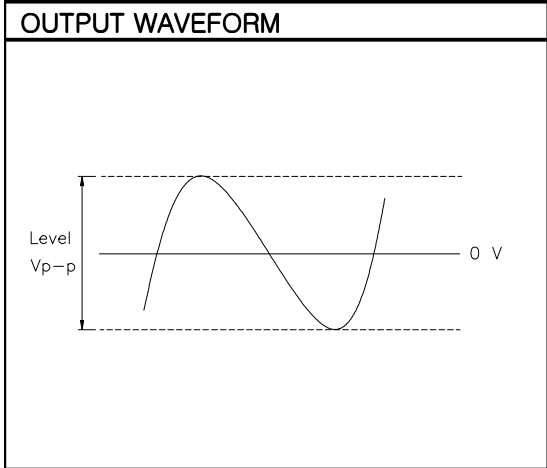
* PART NUMBERING GUIDE



MECHANICAL DIMENSIONS ELECTRICAL SPECIFICATION



Frequency range	10.000MHz to 27.000MHz
Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging	± 1.0 ppm to ± 5.0 ppm ± 0.2 ppm max / $V_{dd} \pm 5\%$ ± 0.2 ppm max / $15\text{pF} \pm 10\%$ ± 1.0 ppm max/ year
Temperature Range Operating Storage	See Table 2 -55°C to 125°C
Supply Voltage	2.8V ~3.3V , 5.0V ($\pm 5\%$)
Input Current	2.0mA 10.000MHz to 27.000MHz
Output characteristics Clipped sinewave	Level 3.0V 0.8Vp-p min Level 5.0V 1.0Vp-p min Load 10k Ω //10pF
Phase Noise (typical) 20MHz offset	-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 Control Voltage Range	± 5.0 ppm or ± 12 ppm min $1.5\text{V} \pm 1.0\text{V}$ (V_{dd} : 3.0V, 5.0V)



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

TABLE1

Symbol	Stability
10	± 1.0 ppm
15	± 1.5 ppm
20	± 2.0 ppm
25	± 2.5 ppm
30	± 3.0 ppm
35	± 3.5 ppm
50	± 5.0 ppm

TABLE2

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 $^\circ\text{C}$