

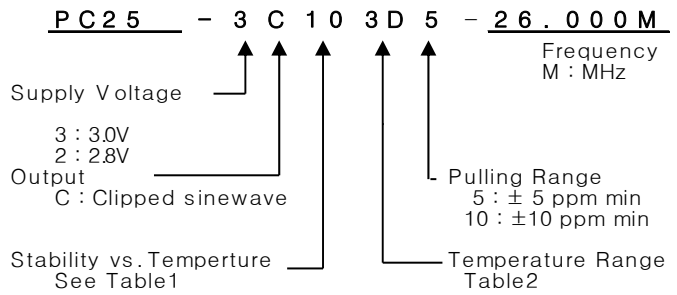
VCTCXO

PC25 Series

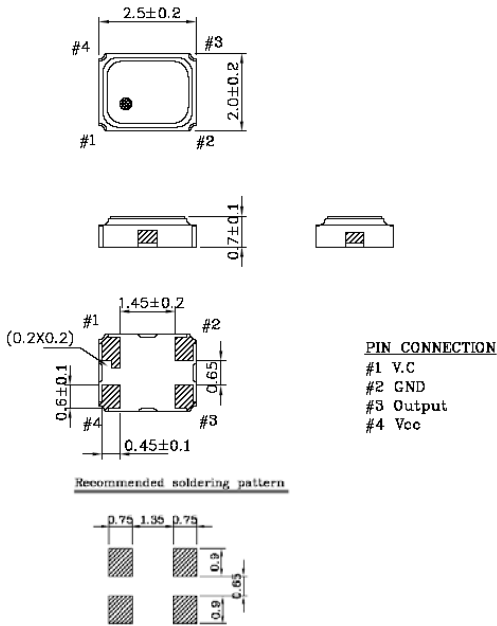
Clipped sinewave

4PAD SMD PACKAGE

* PART NUMBERING GUIDE



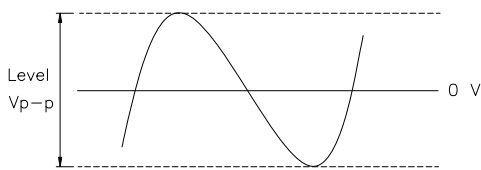
MECHANICAL DIMENSIONS



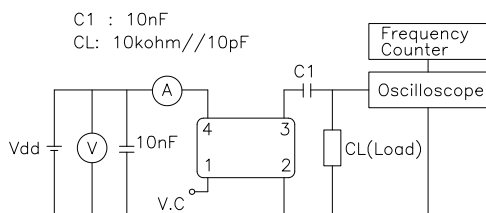
ELECTRICAL SPECIFICATION

Frequency range	13.000MHz to 52.000MHz
Frequency tolerance	± 2.0 ppm at 25deg, 24 hours after Reflow
Frequency Stability	± 0.5 ppm to ± 2.5 ppm
vs. Temperature	± 0.3 ppm max / $V_{dd} \pm 5\%$
vs. Supply Voltage	± 0.2 ppm max / $15\text{pF} \pm 10\%$
vs. Load	± 1.0 ppm max/ year
vs. Aging	
Temperature Range	
Operating	See Table 2
Storage	-55°C to 125°C
Supply Voltage	2.8V ~3.3V ($\pm 5\%$)
Input Current	2.5mA max.
Output characteristics	Level 0.8Vp-p min
Clipped sinewave	Load $10\text{k}\Omega//10\text{pF}$
Phase Noise (typical)	-80 dBc / Hz @ 10Hz -110 dBc / Hz @ 100Hz -135 dBc / Hz @ 1KHz -140 dBc / Hz @ 10KHz -145 dBc / Hz @ 100KHz
20MHz offset	
Voltage Control Characteristics	
Output Pulling Range	± 5.0 ppm or ± 10 ppm min
Control Voltage Range	$1.5\text{V} \pm 1.0\text{V}$ ($V_{dd} : 3.0\text{V}$)

OUTPUT WAVEFORM



TEST CIRCUIT



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

TABLE2

Symbol	Temp.	Symbol	Temp.
0	0°C	A	50°C
1	-10°C	B	60°C
2	-20°C	C	70°C
3	-30°C	D	75°C
4	-40°C	E	80°C
		F	85°C