

# VCTCXO

PC205M/PC207M Series  
Clipped sinewave  
14PIN DIP PACKAGE

## \* PART NUMBERING GUIDE

**PC207MH - 5 C 10 3 D 5 - 10.000M**

PC207M (Hermetic) ↑  
PC207MH(with Trimmer) ↑  
PC205M (Hermetic) ↑  
PC205MH(with Trimmer) ↑

Supply Voltage  
5 : 5.0V  
3 : 3.3V

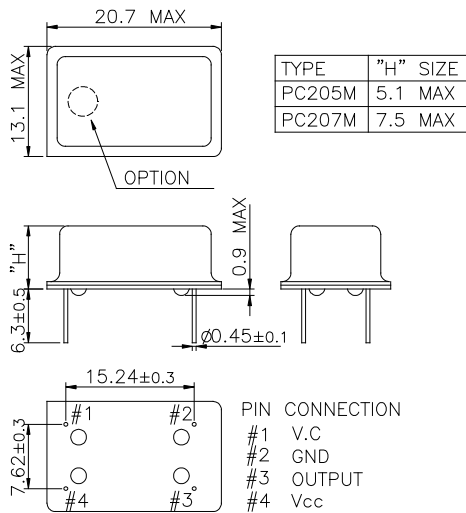
Output  
C : Clipped sinewave  
Stability vs. Temperature  
See Table1

Frequency  
M : MHz

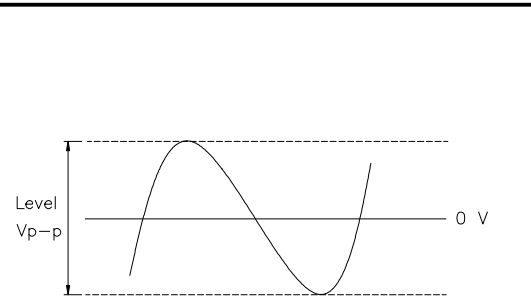
Pulling Range  
5 : ± 5 ppm min  
10 : ±10 ppm min

Temperature Range  
Table2

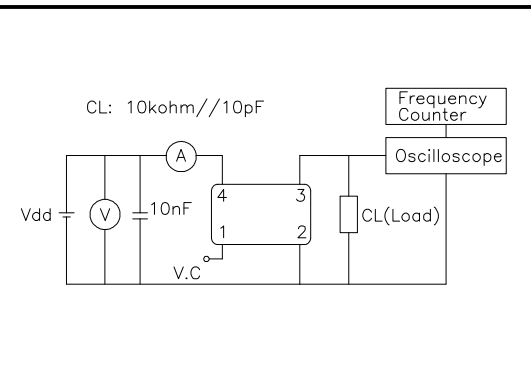
### MECHANICAL DIMENSIONS



### OUTPUT WAVEFORM



### TEST CIRCUIT



### ELECTRICAL SPECIFICATION

Frequency range	6.000MHz to 190.000MHz All combination of Frequency range Vs. Package type might not be available ,please contact factory.
Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging	±0.5 ppm to ±5.0ppm ±0.1 / ±0.2 ppm max / Vdd ± 5% ±0.2 ppm max /15pF ±10% ±1.0 ppm max/ year
Temperature Range Operating Storage	See Table 2 -55°C to 125°C
Supply Voltage	3.3V ± 5% 5.0V ± 5%
Input Current Clipped sinewave	6.00MHz ~ 190.000MHz 2.0mA max ~ 30mA max
Output characteristics	Level 3.3V 0.8Vp-p min 5.0V 1.0Vp-p min Load 10kΩ//10pF
Phase Noise (typical) 20MHz offset	-80 dBc / Hz @ 10Hz -120 dBc / Hz @ 100Hz -135 dBc / Hz @ 1KHz -140 dBc / Hz @ 10KHz -145 dBc / Hz @100KHz
Frequency Adjustment	±3ppm min by internal trimmer (OPTION)
Voltage Control Characteristics	
Output Pulling Range (ΔF/ΔV)	±5.0ppm or ±10ppm min (ΔF/ΔV >±20ppm is available, please contact us)
Control Voltage Range	1.65V ± 1.5V ( Vdd : 3.3V ), 2.5V ± 2.0V ( Vdd : 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
05	±0.5ppm
10	±1.0ppm
15	±1.5ppm
20	±2.0ppm
25	±2.5ppm
30	±3.0ppm
35	±3.5ppm
50	±5.0ppm

### 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