

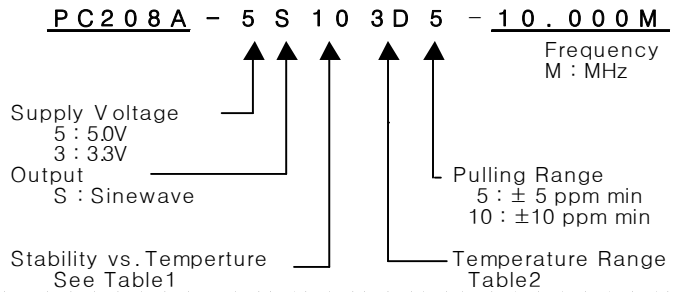
# VCTCXO

## PC208A Series

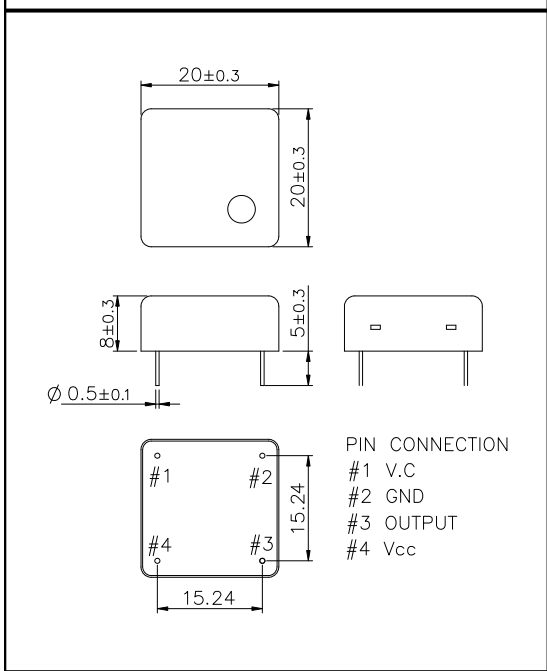
### Sinewave

### 4PIN DIP PACKAGE

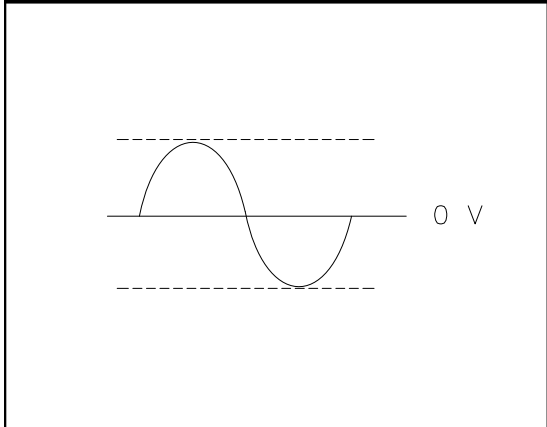
#### \* PART NUMBERING GUIDE



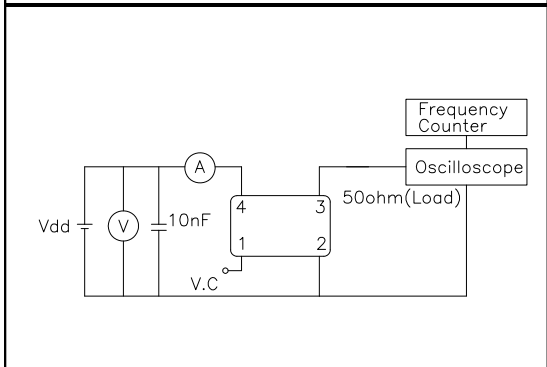
## MECHANICAL DIMENSIONS



## OUTPUT WAVEFORM



## TEST CIRCUIT



## ELECTRICAL SPECIFICATION

|   |  |
|---|--|
| Frequency range   | 1.00MHz to 600.000MHz<br>(All combinations for Frequency in the range and temp. stability can't be available, please contact factory.) |
| Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging | ±0.5 ppm to ±5.0ppm<br>±0.1 / ±0.2 ppm max / Vdd ± 5%<br>±0.2 ppm max / 15pF ±10%<br>±1.0 ppm max/ year                                |
| Temperature Range Operating Storage                                       | See Table 2<br>-55°C to 125°C  |
| Supply Voltage  | 3.3V ± 5%<br>5.0V ± 5%   |
| Input Current Sinewave  | 1.00MHz ~ 600.000MHz<br>10.0mA max ~ 50mA max  |
| Output characteristics  | Sinewave<br>Level 3.3V 0 dBm typ<br>5.0V +5 dBm typ<br>Load 50Ω  |
| Phase Noise (typical) 20MHz offset  | -80 dBc / Hz @ 10Hz<br>-120 dBc / Hz @ 100Hz<br>-135 dBc / Hz @ 1KHz<br>-140 dBc / Hz @ 10KHz<br>-145 dBc / Hz @100KHz                 |
| Frequency Adjustment  | ±3ppm min by internal trimmer  |
| Voltage Control Characteristics   |  |
| Output Pulling Range (ΔF/ΔV)  | ±5.0ppm or ±10ppm min<br>(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                    |

| 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   |

| 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  |