

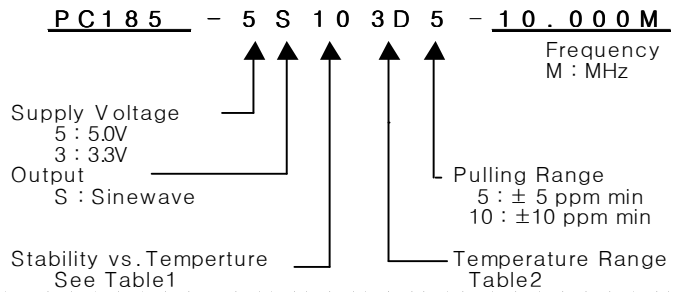
# VCTCXO

## PC195 Series

### Sinewave

### 4PAD SMD PACKAGE

#### \* PART NUMBERING GUIDE



MECHANICAL DIMENSIONS	ELECTRICAL SPECIFICATION				
<p style="text-align: center;">PIN CONNECTION</p> <p># 1 V.C # 2 GND # 3 OUTPUT # 4 Vcc</p> <p style="text-align: center;">Recommended Soldering Pattern</p>	Frequency range	6.000MHz to 190.000MHz			
	Frequency Stability vs. Temperature vs. Supply Voltage vs. Load vs. Aging	$\pm 0.5$ ppm to $\pm 5.0$ ppm $\pm 0.1 / \pm 0.2$ ppm max / $V_{dd} \pm 5\%$ $\pm 0.2$ ppm max / $15\text{pF} \pm 10\%$ $\pm 1.0$ ppm max/ year			
	Temperature Range Operating Storage	See Table 2 $-55^\circ\text{C}$ to $125^\circ\text{C}$			
	Supply Voltage	$3.3\text{V} \pm 5\%$ $5.0\text{V} \pm 5\%$			
	Input Current  Sinewave	$6.00\text{MHz}$ ~ $190.000\text{MHz}$ $12.0\text{mA max}$ ~ $100\text{mA max}$			
	Output characteristics	Level	$3.3\text{V}$	Sinewave $0$ dBm typ	
		Load	$5.0\text{V}$	$10$ dBm typ	
			$50\Omega$		
	Phase Noise (typical) 20MHz offset	$-80$ dBc / Hz @ $10\text{Hz}$ $-120$ dBc / Hz @ $100\text{Hz}$ $-135$ dBc / Hz @ $1\text{KHz}$ $-140$ dBc / Hz @ $10\text{KHz}$ $-145$ dBc / Hz @ $100\text{KHz}$			
	Frequency Adjustment	$\pm 3$ ppm min by internal trimmer			
	Voltage Control Characteristics				
	Output Pulling Range ( $\Delta F / \Delta V$ )	$\pm 5.0$ ppm or $\pm 10$ ppm min ( $\Delta F / \Delta V > \pm 20$ ppm is available, please contact us)			
	Control Voltage Range	$1.65\text{V} \pm 1.5\text{V}$ ( $V_{dd} : 3.3\text{V}$ ), $2.5\text{V} \pm 2.0\text{V}$ ( $V_{dd} : 5.0\text{V}$ )			
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				
TABLE1		TABLE2			
Symbol	Stability	Symbol	Temp.	Symbol	Temp.
05	$\pm 0.5$ ppm	0	$0^\circ\text{C}$	A	$50^\circ\text{C}$
10	$\pm 1.0$ ppm	1	$-10^\circ\text{C}$	B	$60^\circ\text{C}$
15	$\pm 1.5$ ppm	2	$-20^\circ\text{C}$	C	$70^\circ\text{C}$
20	$\pm 2.0$ ppm	3	$-30^\circ\text{C}$	D	$75^\circ\text{C}$
25	$\pm 2.5$ ppm	4	$-40^\circ\text{C}$	E	$80^\circ\text{C}$
30	$\pm 3.0$ ppm			F	$85^\circ\text{C}$
35	$\pm 3.5$ ppm				
50	$\pm 5.0$ ppm				

