

PD7000 S.M.D. TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR (TCXO)

The PD7000 series is a recognized industry standard, providing a range of temperature compensated crystal oscillators with a number of options such as HCMOS or clipped sinewave outputs.

ADVANTAGES

- Surface Mount
- Extended Temperature Range
- Optional Output and Adjust Method
- Wide Operating Frequency Range

APPLICATIONS

- Telecommunications
- Portable Instrumentation
- Mobile Communications
- Global Positioning Systems (GPS)

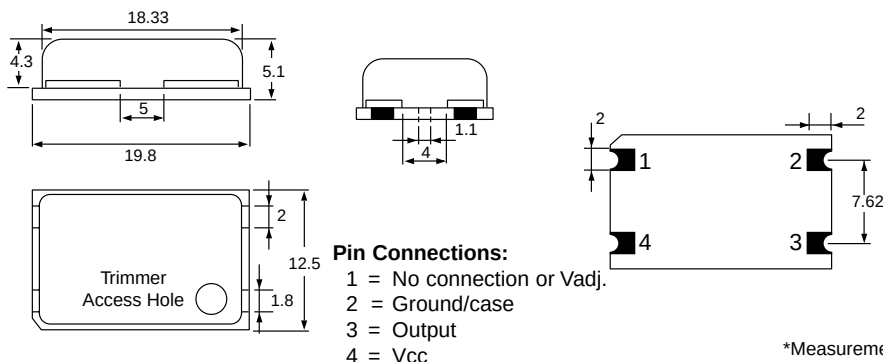


Electrical Performance ($T_a=25^{\circ}\text{C}$, $C_L = 10\text{k}\Omega/10\text{pF}$ and $V_{cc} = +5.0\text{V}$)

PARAMETER	MINIMUM	MAXIMUM	UNITS
Nominal Frequency (F_0)	8.0	50	MHz
Calibration Tolerance	-1.0	+1.0	ppm
Frequency Stability			ppm
Over Temperature Range (See Note 2)	-2.5	+2.5	
Ageing (per year at $+25^{\circ}\text{C}$)	-1.0	+1.0	
Over Supply Voltage Variation ($V_{cc} = +5.0\text{V} \pm 0.25\text{V}$)	-0.3	+0.3	
Operating Temperature Range (See Note 2)	-30	+75	$^{\circ}\text{C}$
Storage Temperature Range	-40	+85	$^{\circ}\text{C}$
Supply Voltage (V_{cc}) (See Note 2)	+4.75	+5.25	V
Supply Current (Dependent upon nominal frequency)	2.0	15.0	mA
Output Waveform HCMOS/TTL (Option A i.e. PD7000A)			
Logic Levels	0.1 V_{cc}	0.9 V_{cc}	V
Duty Cycle (@ $V_{cc}/2$)	40	60	%
Fall and rise times	3	10	ns
Output Waveform Clipped sinewave (Option B i.e. PD7000B)			V
Peak to Peak amplitude	1.0		
Frequency Adjustment (Internal trimmer)	± 3		ppm
Voltage Control $+2.5\text{V} \pm 2.0\text{V}$ (Add suffix V i.e. PD7000AV)	± 5		ppm

Notes

1. To order state part number, options and nominal frequency (e.g. PD7000 AV 10.000MHz).
2. Other temperature ranges, stabilities and supply voltages are available upon request.



PRECISION DEVICES INC.

(US) Tel (800) 274-XTAL/(608) 831-4445 • (UK) Tel +44 (0) 1223 834444 • (HK) Tel (852) 2637-3626

www.pdixtal.com