

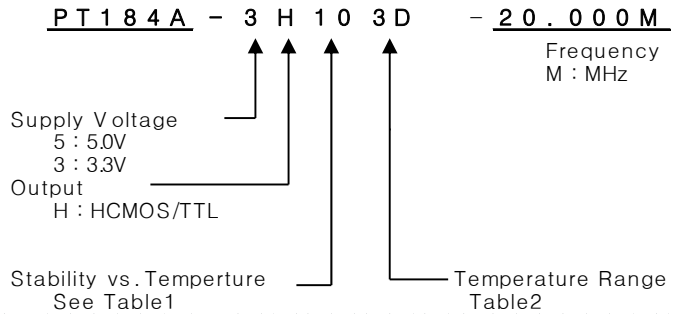
TCXO

PT184A Series

HCMOS/TTL

14PIN DIP PACKAGE

* PART NUMBERING GUIDE



MECHANICAL DIMENSIONS

(TOP)
18.3±0.3
14
8
11.7±0.5
7

(BOTTOM)
15.24±0.3
7+
7-
8+
14+
7.62±0.3

PIN CONNECTION
1 N.C or V.C
7 GND
8 OUTPUT
14 Vcc

- TCXO : PIN1 N/C
-standard : 3 pins
-if 4pins need, please contact factory.
- VCTCXO : PIN1 VC

ELECTRICAL SPECIFICATION

Frequency range	1.000KHz to 250.000MHz (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 ±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 3.3 V , 5V	1.000KHz ~ 40.000MHz 15mA max ~ 30mA max	250.000MHz 50mA max
Output characteristics	HCMOS Logic "1" 90% Vdd min Logic "1" 10% Vdd max Load 15pF Duty Cycle 40/60 Rise & Fall 10nS max	TTL 2.4V min 0.4V min 10TTL 40/60 10nS max
Phase Noise (typical) @20MHz	-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	

OUTPUT WAVEFORM

TTL
"1" Level 2.4V
1.4V
0.4V
"0" Level 0.0V

HCMOS
90%Vdd
50%Vdd
10%Vdd
0.0V

$DUTY(\%) = \frac{T_a}{T_a + T_b} \times 100$

TEST CIRCUIT

CL: 15pF(STD)

Vdd

V.C or N.C

Frequency Counter

Oscilloscope

CL(Load)

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