

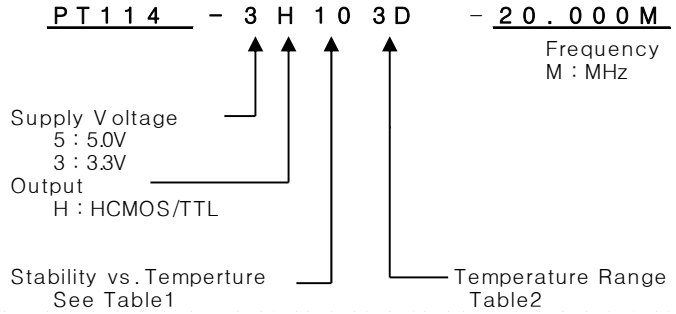
# TCXO

## PT114 Series

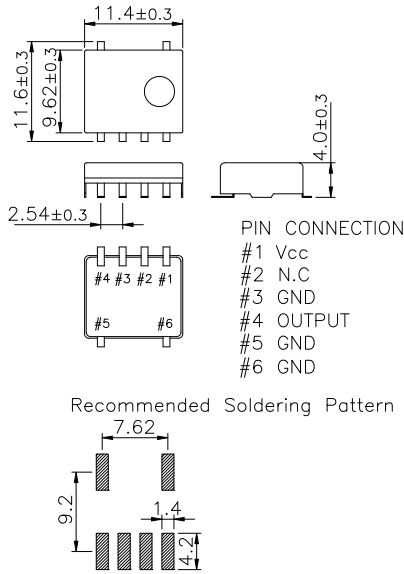
### HCMOS/TTL

### 6PAD SMD PACKAGE

#### \* PART NUMBERING GUIDE



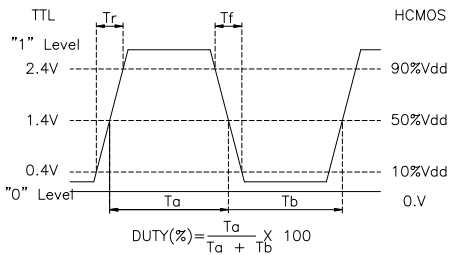
#### MECHANICAL DIMENSIONS



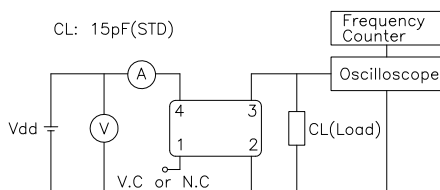
#### ELECTRICAL SPECIFICATION

Frequency range	1.00KHz 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 / ±0.3 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 3.3V , 5V	1.000KHz ~ 40.000MHz ~ 250.000MHz 15mA max ~ 30mA max ~ 50mA max	
Output characteristics	HCMOS	TTL
Logic "1"	90% Vdd min	2.4V min
Logic "1"	10% Vdd max	0.4V min
Load	15pF	10TTL
Duty Cycle	40/60	40/60
Rise & Fall	10nS max	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



#### TEST CIRCUIT



#### 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