

# PC Type Programmable Crystal Oscillator

RoHS Compliant Standard

## FEATURE

1. Typical 7.5 x 5.0 x 1.65mm ceramic SMD package.
2. Quick delivery and short lead-time.
3. Wide output frequency range.
4. Output frequency up to 160MHz.
5. Good shock resistance and reliability.
6. Packing: Tape & Reel, 1000/3000 pcs per Reel, 1~99 pcs per Bulk/Tape.



Actual Size

## ORDERING INFORMATION

P	C	C	P	D	C	J	-	N	F	-	?
XO	Package (mm)	Supply Voltage (V)	Tri-State Function	Freq. Stability (ppm)	Temp. Range (°C)	Output Logic and Symmetry	Dash	Appearance	Lead Free	Dash	Freq.(MHz)
	7.5x5	C: 5 E: 3.3	With Tri-State Programmable	C: ± 20 D: ± 25 G: ± 50 H: ± 100	I: -10~+60 C: -20~+70 L: -40~+85	50±5% 50±10% TTL A B TTL 50pF E R CMOS 15pF J K CMOS 50pF F G		N:Normal	F:RoHS Compliant		xx.xxxxxx

### Ordering Example: PCCPDCJ-NF-14.318180 MHz

Programmable XO C-TYPE; V<sub>DD</sub>: 5V; with Tri-State Programmable; Freq. Stability: ±25ppm; Temp. Range: -20°C to +70°C. Load: CMOS 15pF, Symmetry: 50±5%; Normal Appearance; RoHS Compliant; Freq. 14.318180MHz

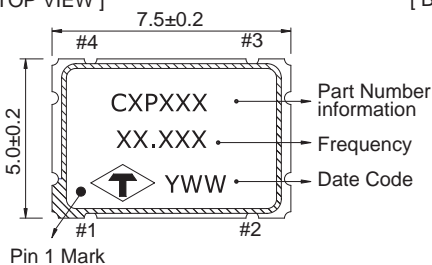
## FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	C:±20	D:±25	G:±50	H:±100
I -10 ~ +60	○	○	○	○	○
C -20 ~ +70	△	○	○	○	○
L -40 ~ +85	X	△	○	○	○

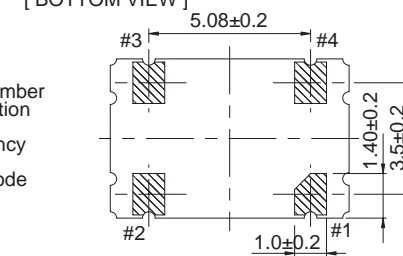
○:Standard △:Available (case by case) X:Not available

## OUTLINE DRAWING

[ TOP VIEW ]

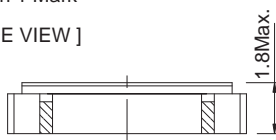


[ BOTTOM VIEW ]

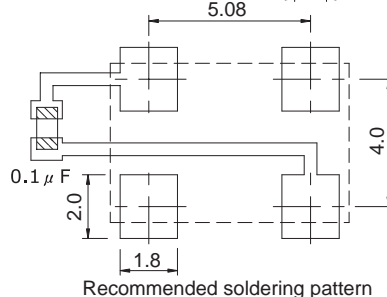


Pin	Function
#1	Tri-State
#2	GND
#3	Output
#4	V <sub>DD</sub>

[ SIDE VIEW ]



UNIT : mm



Recommended soldering pattern

## ELECTRICAL SPECIFICATION

Parameter	Min.		Max.		Unit
	5.0	3.3	5.0	3.3	
Supply Voltage Variation(V <sub>DD</sub> ) 10%	4.5	2.97	5.5	3.63	V
Frequency Range	6		160	100	MHz
Operating Temp. Range	Refer to Ordering Information				°C
Frequency Stability *	Refer to Ordering Information				ppm
<b>Supply Current</b>					
6.0MHz Fo 50MHz	—		35	25	mA
50MHz<Fo 100MHz	—		45	30	
100MHz<Fo 160MHz	—		50	—	
<b>Output Level (CMOS)</b>					
Output High (Logic "1")	V <sub>DD</sub> -0.4		—		V
Output Low (Logic "0")	—		0.4		
<b>Transition Time:Rise/Fall Time*</b>					
6.0MHz Fo 100MHz	—		3	3	nSec
100MHz<Fo 160MHz	—		3	—	
<b>Start Time</b>	—		8		mSec
<b>Tri-State (Input to Pin 1)</b>					
Output Active	(V <sub>DD</sub> /2)+1		—		V
Output in High Impedance State	—		0.4		
<b>Absolute Clock Period Jitter</b>	—		200		pSec
<b>Storage Temp. Range</b>	-55		125		°C

\*Inclusive of calibration @ 25°C, operating temperature range, input voltage variation, load variation, aging, shock, and vibration.

\*Transition times are measured between 10% and 90% of V<sub>DD</sub>, with an output load of 15pF.