

# CFPX-181 CRYSTALS

ISSUE 5; 19 JANUARY 2009 – RoHS 2002/95/EC

## Holder Style

- Hermetically sealed ceramic package with a seam sealed metal lid

## General Specifications

- Load Capacitance (CL): 10pF to 30pF or Series
- Drive Level: 100µW max
- Ageing: ±1ppm max per year at 25°C

## Packaging

- Loose in bulk pack or tape and reel

## Standard Frequency Tolerance and Stability

- ±10ppm to ±100ppm

## Operating Temperature Range

- 10 to 60°C

## Storage Temperature Range

- 40 to 90°C

## Environmental

- Drop: naturally dropped 3 times from a height of 75cm onto a hardwood surface
- Vibration: frequency 10–55Hz, 1.5mm amplitude, 1min period, X, Y & Z axes, 2hrs in each direction

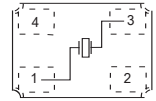
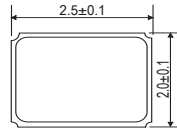
## Marking includes

- Frequency

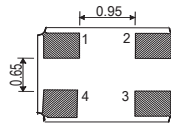
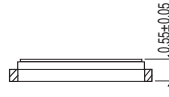
## Minimum Order Information Required

- Frequency + Holder + Frequency Tolerance @ 25°C  
+ Frequency Stability + Operating Temperature Range  
+ Circuit Condition

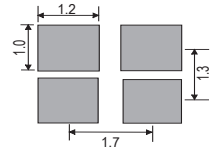
## Outline (mm)



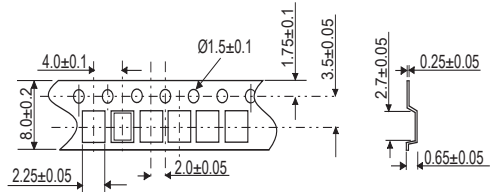
Pads 1 & 3 Crystal  
Pads 2 & 4 GND (lid)



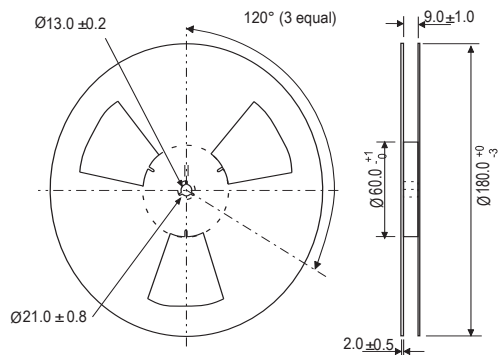
## Solder Pad Layout



## Tape (mm)



## Reel (mm)



**Electrical Specifications – maximum limiting values**

Frequency Range	Frequency Tolerance @25°C ±2°C	Operating Temperature Range	Frequency Stability Available Over Operating Temperature Range		ESR Max	Vibration Mode
			Minimum	Maximum		
16.0 to <19.0MHz	±10ppm to ±50ppm	-10 to 60°C	±10ppm	±100ppm	150Ω	Fundamental AT cut
19.0 to <40.0MHz					100Ω	
40.0 to 50.0MHz					70Ω	
Note. For any other frequencies / specification combinations, please contact our sales office						

QUARTZ  
CRYSTALS