

# CFPX-181

SURFACE MOUNT  
QUARTZ CRYSTALS

ISSUE 3; 10 AUG 2008



## Delivery Options

- Please contact our sales office for current leadtimes

## Holder Style

- CFPX-181 surface mount crystals are encapsulated in a hermetically sealed ceramic package with a seam sealed metal lid.

## General Specifications

- Load Capacitance ( $C_L$ ): 10pF to 30pF or Series
- Drive Level: 10 $\mu$ W typical, 100 $\mu$ W max
- Ageing:  $\pm 1$ ppm max per year at 25°C

## Packaging

- CFPX-181 surface mount crystals are available packaged individually or on tape and reel

## Standard Frequency Tolerance and Stability

- $\pm 10$ ppm to  $\pm 100$ ppm

## 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

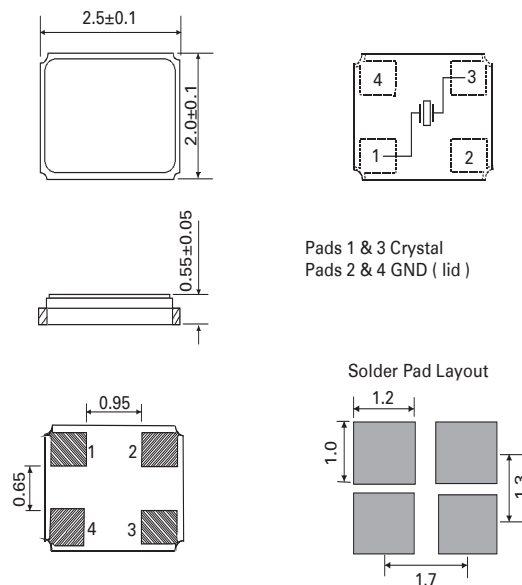
## Marking includes

- Frequency

## Minimum Order Information Required

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

## Outline in mm



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

## Solder Pad Layout



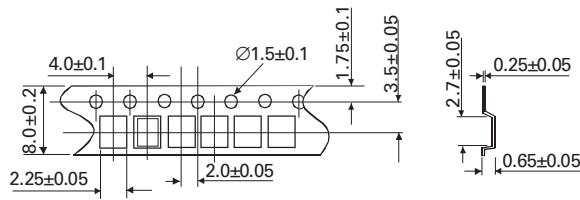
**Electrical Specification – maximum limiting values**

| Frequency Range  | Frequency Tolerance @ 25°C ±2°C | Operating Temperature Range | Frequency Stability Available Over Operating Temperature |         | 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      |                    |

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**Note.** For any other frequencies / specifications, please contact our sales office.

**Outline in mm - Tape**



**Outline in mm - Reel**

