



ISSUE 4; April 2012 - RoHS 2011/65/EU

**Description**

- Standard 2.5 x 2mm SMD crystal in a hermetically sealed ceramic package with a seam sealed metal lid  
Please see our CFPX-181 for a low ageing version

**Frequency Range**

- |                     |                    |
|---------------------|--------------------|
| Frequency           | 16.0000 to 50.0Mhz |
| Frequency Tolerance | ±10ppm to ±50ppm   |

**General Specification**

- |                        |                            |
|------------------------|----------------------------|
| Load Capacitance (CL)  | 10.0pF to 30.0pF or Series |
| Drive Level            | 100µW max                  |
| Ageing                 | ±3ppm max per year at 25°C |
| Shunt Capacitance (C0) | 5pF max                    |

**Operating Temperature Ranges**

- 10 to 60°C
- 20 to 70°C
- 40 to 85°C

**Environmental Parameters**

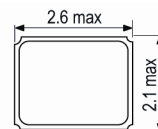
- Drop: 100cm drop (3 times) onto hard wooden board
- Storage Temperature Range: -55 to 125°C
- Vibration: MIL-STD-883F, Method 2007.3: 20G (20Hz-2000Hz), 1.52mm amplitude, 20mins in 3 mutually perpendicular planes (total 4hrs)

**Ordering Information**

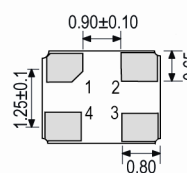
- Example  
20.0MHz CFPX-218  
20/20/-40 to 85C/16 FUND
- Frequency\*  
Model\*  
Frequency Tolerance (@ 25°C)\*  
Frequency Stability (over operating temperature range)\*  
Operating Temperature Range\*  
Load Capacitance\*  
Overtone  
(\*minimum required)

**Packing Details**

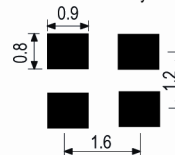
- |                           |  |
|---------------------------|--|
| ■ Pack Style: <b>Bulk</b> | Loose in bulk pack                         |
| Pack Size                 | 100  |
| ■ Pack Style: <b>Reel</b> | Tape and reel in accordance with EIA-481-D |
| Pack Size                 | 1,000                                      |
- Alternative packing options available

**Outline (mm)****Pad Connections**

1. Crystal
2. GND
3. Crystal
4. GND



Underside View

**Solder Pad Layout****Sales Office Contact Details:**

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**Electrical Specification - maximum limiting values**

Frequency Range	Frequency Tolerance @ 25°C	Stability		Temperature Range	ESR Max	Vibration Mode
		Min	Max			
16.0 to <30.0MHz	±10ppm to ±50ppm	±15ppm ±15ppm ±20ppm	±100ppm	-10 to 60°C -20 to 70°C -40 to 85°C	100Ω	Fundamental
30.0 to <50.0MHz	±10ppm to ±50ppm	±15ppm ±15ppm ±20ppm	±100ppm	-10 to 60°C -20 to 70°C -40 to 85°C	70Ω	Fundamental

*This document was correct at the time of printing; please contact your local sales office for the latest version*

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