



ISSUE 4; October 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: 16.0 to 50.0MHz
- Frequency Stability:  $\pm 15.00\text{ppm}$
- Frequency Tolerance:  $\pm 10\text{ppm}$  to  $\pm 50\text{ppm}$

**General Specification**

- Load Capacitance (CL): 10.0pF to 30.0pF or Series
- Drive Level: 100 $\mu$ W max
- Ageing:  $\pm 3\text{ppm}$  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**

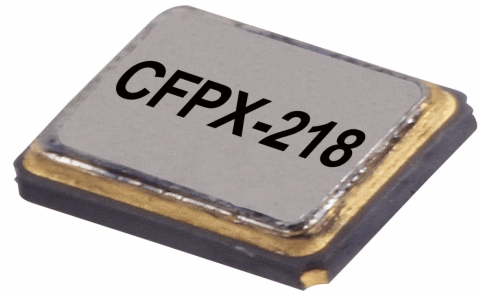
- Storage Temperature Range: -55 to 125°C
- Drop: 100cm drop (3 times) onto hard wooden board
- Vibration: MIL-STD-883F, Method 2007.3: 20G (20Hz-2000Hz), 1.52mm amplitude, 20mins in 3 mutually perpendicular planes (total 4hrs)

**Ordering Information**

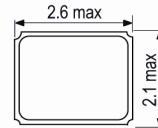
- Frequency\*
- Model\*
- Frequency Tolerance (@ 25°C)\*
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Load Capacitance\*
- Overtone (\*minimum required)
- Example  
20.0MHz CFPX-218  
20/20/-40 to 85C/16 FUND

**Packing Details**

- Pack Style: **Bulk** Loose in bulk pack  
Pack Size 100
- Pack Style: **Reel** Tape and reel in accordance with EIA-481-D  
Pack Size 1,000
- Alternative packing options available

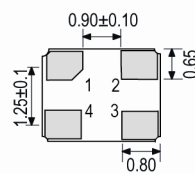


**Outline (mm)**

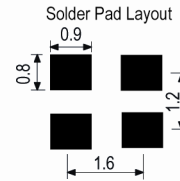


**Pad Connections**

- Crystal
- GND
- Crystal
- GND



Underside View



Solder Pad Layout

**Sales Office Contact Details:**

UK: +44 (0)1460 270200  
Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18  
USA: +1 (0)408.273.4530

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)



**Electrical Specification - maximum limiting values**

Frequency Range	Frequency Tolerance	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*

**Sales Office Contact Details:**

UK: +44 (0)1460 270200

Germany: +49 (0)7264 9145-0

France: +33 (0)5 34 50 91 18

USA: +1 (0)408.273.4530

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)