

CFPX-180 CRYSTALS

ISSUE 7; 1 NOVEMBER 2010 – RoHS 2002/95/EC

Description

- Standard 3.2 x 2.5mm SMD crystal
- Ceramic package with a seam sealed metal lid, hermetically sealed
- Stock parts listed at the beginning of this chapter

General Specifications

- Load Capacitance (CL): 16pF standard
- Drive Level: 100µW max
- Ageing: ±5ppm max per year at 25°C
- Shunt Capacitance (C0): 7pF max

Standard Frequency Tolerances and Stability

- ±10ppm to ±50ppm

Operating Temperature Ranges

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

Storage Temperature Range

- 55 to 125°C

Environmental

- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms, 1/2 sine wave
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

Packaging

- Loose in bulk pack, 100pcs per bag
- Tape and reel in accordance with EIA-481-D, 1kpcs per reel (please see pages 372 & 373)

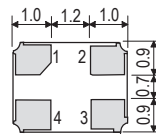
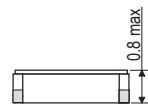
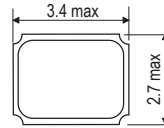
Ordering Information (*minimum required)

- Frequency*
- Model*
- Frequency Tolerance (@25°C)*
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Load Capacitance*
- Overtone

Example

- 20.0MHz CFPX-180
50/50/-40 to 85C/16 FUND

Outline (mm)

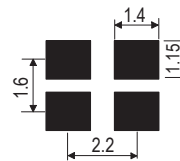


Underside View

Pad Connections

- Crystal
- GND
- Crystal
- GND

Solder Pad Layout





Electrical Specifications – maximum limiting values

Frequency Range	Frequency Tolerance @25°C ±2°C	Operating Temperature Ranges	Frequency Stability Available Over Operating Temperature Range		ESR Max	Vibration Mode
			Minimum	Maximum		
12.0 to <13.0MHz	±10ppm to ±50ppm	-10 to 60°C	±10ppm	±50ppm	250Ω	Fundamental AT Cut
		-20 to 70°C	±15ppm			
		-40 to 85°C	±20ppm			
13.0 to <16.0MHz		-10 to 60°C	±10ppm		150Ω	
		-20 to 70°C	±15ppm			
		-40 to 85°C	±20ppm			
16.0 to <30.0MHz		-10 to 60°C	±10ppm		100Ω	
		-20 to 70°C	±15ppm			
		-40 to 85°C	±20ppm			
30.0 to 67.0MHz	-10 to 60°C	±10ppm	60Ω			
	-20 to 70°C	±15ppm				
	-40 to 85°C	±20ppm				

Note: For any other frequencies / specification combinations, please contact our sales offices

