

ISSUE 9; October 2018

Description

- Standard 3.2 x 2.5mm SMD crystal in a ceramic package with a seam sealed metal lid, hermetically sealed.

Frequency Parameters

- Frequency: 10.0MHz to 200.0MHz
- Frequency Tolerance: $\pm 10.00\text{ppm}$ to $\pm 50.00\text{ppm}$ @ 25°C
- Tolerance Condition: @ 25°C
- Frequency Stability: $\pm 10.00\text{ppm}$ to $\pm 50.00\text{ppm}$
- Ageing: $\pm 5\text{ppm}$ max per year @ 25°C

Electrical Parameters

- Load Capacitance (CL): 8.0pF to 75.0pF
- Shunt Capacitance (C0): 7pF max
- Drive Level: 100µW max

Operating Temperature Ranges

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

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- 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)

Manufacturing Details

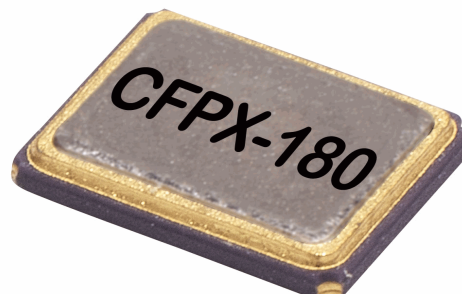
- RoHS Terminations: NiAu
- RoHS Reflow: 260degC 10s

Ordering Information

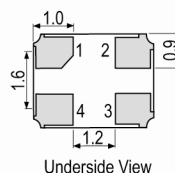
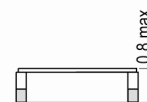
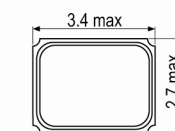
- Frequency*
- Model*
- Frequency Tolerance*
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Load Capacitance*
- Overtone
- (*minimum required)
- Example
- 20.0MHz CFPX-180
- 50/50/-40 to 85C/16 FUND

Compliance

- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



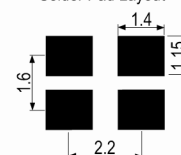
Outline (mm)



Pad Connections

- Crystal
- GND
- Crystal
- GND

Solder Pad Layout



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Packaging Details

- Pack Style: Cutt In tape, cut from a reel
Pack Size: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability Min*	Over Tone Order	ESR
		°C	ppm		Ω
10.0MHz	11.999999MHz	-10 to 60 -20 to 70 -40 to 85	±10 ±10 ±15	Fundamental	200
12.0MHz	15.999999MHz	-10 to 70 -20 to 70 -40 to 85	±10 ±10 ±15	Fundamental	120
16.0MHz	19.999999MHz	-10 to 60 -20 to 70 -40 to 85	±10 ±10 ±15	Fundamental	70
20.0MHz	29.999999MHz	-10 to 70 -20 to 70 -40 to 85	±10 ±10 ±15	Fundamental	50
30.0MHz	39.999999MHz	-10 to 60 -20 to 70 -40 to 85	±10 ±10 ±15	Fundamental	40
40.0MHz	54.0MHz	-10 to 70 -20 to 70 -40 to 85	±10 ±10 ±15	Fundamental	35
54.000001MHz	200.0MHz	-10 to 60 -20 to 70 -40 to 85	±30 ±30 ±30	Fundamental	60

*Stability Maximum values ±50ppm

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