

ISSUE 13; January 2025

Description

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

Frequency Parameters

- Frequency: 8.0MHz to 200.0MHz
- Frequency Tolerance: $\pm 10.00\text{ppm}$ to $\pm 50.00\text{ppm}$
- Tolerance Condition: @25°C
- Frequency Stability: $\pm 10.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 5\text{ppm}$ max per year @25°C

Electrical Parameters

- Load Capacitance (CL): 4.0pF to 75.0pF
- Shunt Capacitance (C0): 7pF max
- Drive Level: 100µW max

Operating Temperature Ranges

- 10 to 60°C
- 20 to 70°C
- 40 to 85°C
- 40 to 105°C
- 40 to 125°C

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: 1500g, 0.5ms, 3 times in each of the 3 mutually perpendicular planes.
- Vibration: MIL-STD-883F, 20g (20Hz~2000Hz), 1.52mm amplitude, 20 minutes in 3 mutually perpendicular planes, 4 cycles.

Manufacturing Details

- RoHS Terminations: NiAu
- RoHS Reflow: 260°C max over 10 seconds

Ordering Information

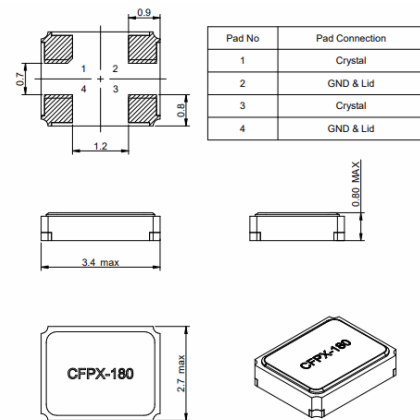
- Frequency*
- Model*
- Frequency Tolerance*
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Load Capacitance*
- Overtone
- (*minimum required)
- Example
- 20.0MHz CFPX-180
- 50/50/-40 to 85C/16 FUND

Compliance

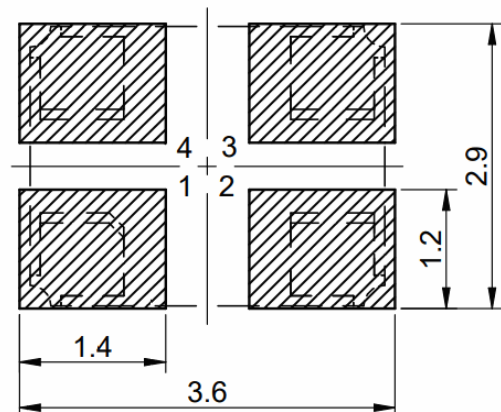
- RoHS Status (2015/863/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



Recommended Solder Pad Layout



Sales Office Contact Details:

UK: +44 (0)1460 270200

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

Packaging Details

- Tape & reel in accordance with EIA-481
Quantities below the standard reel size to be supplied on cut tape
Standard Pack Quantity: 3,000

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Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability Min*	Over Tone Order	ESR
		°C	ppm		Ω
8.0MHz	9.999999MHz	-10 to 60	±10	Fundamental	500
		-20 to 70	±10		500
		-40 to 85	±20		500
		-40 to 105	±50		500
		-40 to 125	±100		500
10.0MHz	11.999999MHz	-10 to 60	±10	Fundamental	200
		-20 to 70	±10		200
		-40 to 85	±15		200
		-40 to 105	±50		200
		-40 to 125	±100		200
12.0MHz	15.999999MHz	-10 to 60	±10	Fundamental	120
		-20 to 70	±10		120
		-40 to 85	±15		120
		-40 to 105	±50		120
		-40 to 125	±100		120
16.0MHz	19.999999MHz	-10 to 60	±10	Fundamental	70
		-20 to 70	±10		70
		-40 to 85	±15		70
		-40 to 105	±50		70
		-40 to 125	±100		70
20.0MHz	29.999999MHz	-10 to 60	±10	Fundamental	50
		-20 to 70	±10		50
		-40 to 85	±15		50
		-40 to 105	±50		50
		-40 to 125	±100		50
30.0MHz	39.999999MHz	-10 to 60	±10	Fundamental	40
		-20 to 70	±10		40
		-40 to 85	±15		40
		-40 to 105	±50		40
		-40 to 125	±100		40
40.0MHz	53.999999MHz	-10 to 60	±10	Fundamental	35
		-20 to 70	±10		35
		-40 to 85	±15		35
		-40 to 105	±50		35
		-40 to 125	±100		35
54.0MHz	200.0MHz	-10 to 60	±30	Fundamental	60
		-20 to 70	±30		60
		-40 to 85	±30		60
		-40 to 105	±50		60
		-40 to 125	±100		60

*Stability Maximum values ±100ppm

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