

ISSUE 1; September 2021

Description

- 1.6 x 1.0mm SMD crystal in a hermetically sealed ceramic package.
Suitable for real time clock applications.

Frequency Parameters

- Frequency 32.768kHz
- Frequency Tolerance $\pm 20.00\text{ppm}$
- Tolerance Condition @ 25°C $\pm 5^\circ\text{C}$
- Ageing $\pm 3\text{ppm}$ max in 1st year @ 25°C $\pm 3^\circ\text{C}$
- Frequency Stability Coefficient: $-0.036\text{ppm}/^\circ\text{C}^2 \pm 10\%$

Electrical Parameters

- Load Capacitance (CL) 4.0pF to 12.5pF
- Shunt Capacitance (C0) 1.2pF typ
- Drive Level 500nW max

Operating Temperature Ranges

- 40 to 85°C

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Drop: 100g dummy, 150cm drop (3 directions x 10 times) onto concrete
- Vibration: 1.5mm amplitude, 10Hz-60Hz, 15mins in 3 mutually perpendicular planes, duration 2hrs each plane

Ordering Information

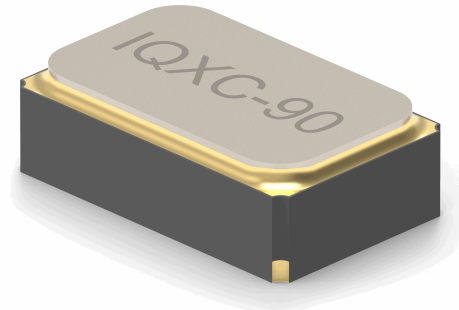
- Frequency Model*
- Frequency Tolerance (@ 25°C)
- Load Capacitance* (*minimum required)
- Example
32.768kHz IQXC-90
20/-/-/12.5

Compliance

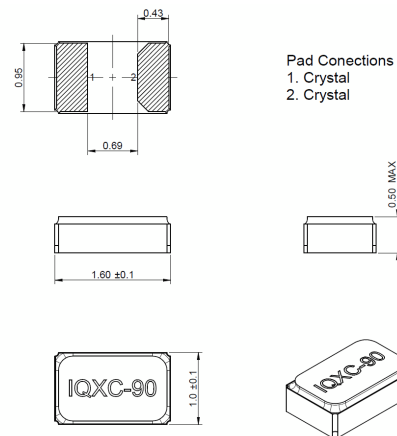
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 5,000
- Pack Style: Cutt Cut tape
Pack Size: 100

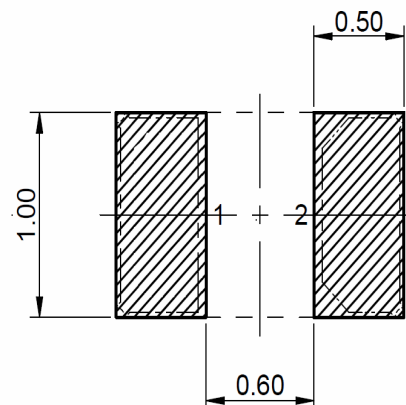


Outline (mm)



Pad Conections
1. Crystal
2. Crystal

Recommended Solder Pad Layout



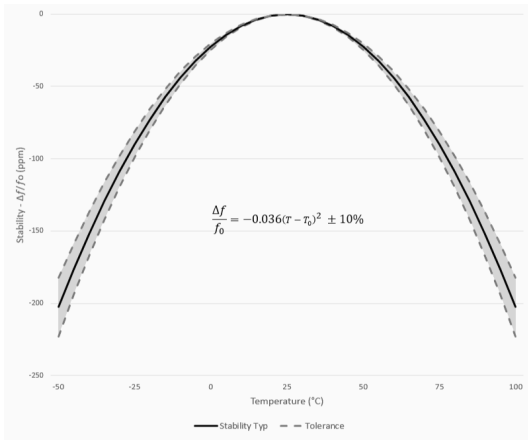
Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

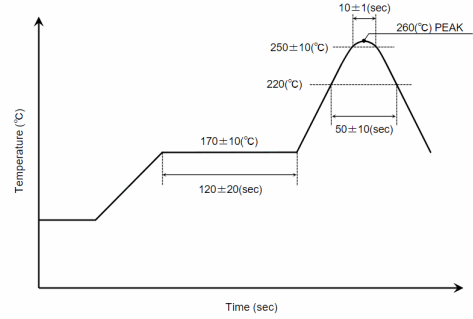
France: 0800 901 383
USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

Typical Frequency Stability Characteristics



Reflow Profile



Note:
(1) The temperature used herein means the temperature on the circuit board.
(2) Reflow is permitted 2 times.

Electrical Specification - maximum limiting values

Frequency Min	Temperature Range	Stability (Min)	Over Tone Order	ESR
	°C	ppm		Ω
32.768000kHz	-40 to 85	-	Fundamental	90,000

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