

ISSUE 3; July 2022

**Description**

- 2.0 x 1.2mm SMD crystal in a hermetically sealed ceramic package with an electron beam sealed metal lid. Suitable for real time clock applications.

**Frequency Parameters**

- Frequency: 32.768kHz
- Frequency Tolerance: ±20.00ppm
- Tolerance Condition: @ 25°C ±5°C
- Ageing: ±3ppm max per year @ 25°C
- Frequency Stability Coefficient: -0.03/°C<sup>2</sup> typ
- Drive Level: 0.1µW±0.01µW recommended, ±0.5µW max
- Motional Capacitance (C1): 7fF typ

**Electrical Parameters**

- Load Capacitance (CL): 6.0pF to 12.5pF
- Shunt Capacitance (C0): 1.3pF typ, 1.7pF max

**Operating Temperature Ranges**

- 40 to 85°C

**Environmental Parameters**

- Storage Temperature Range: -40 to 85°C
- Shock: IEC 60068-2-27: 1000G, 1ms, 3 times in each of 3 mutually perpendicular planes.
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs).

**Manufacturing Details**

- Maximum Reflow Temperature: 260°C for 5secs max
- RoHS Terminations: Au over Ni over W base
- RoHS Reflow: 260°C max for 5secs max

**Ordering Information**

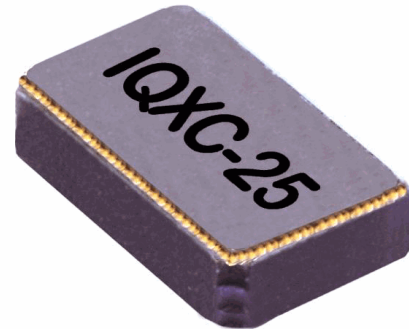
- Frequency Model\*  
Frequency Tolerance (@ 25°C)  
Load Capacitance\*  
(\*minimum required)
- Example  
32.768kHz IQXC-25  
20/-/12.5

**Compliance**

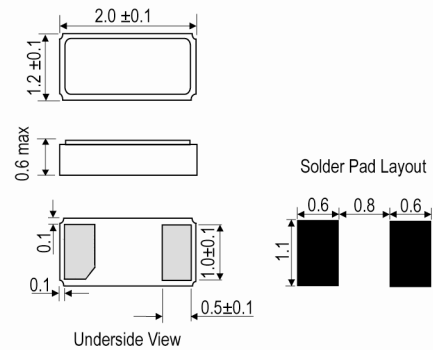
- RoHS Status (2015/863/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

**Packaging Details**

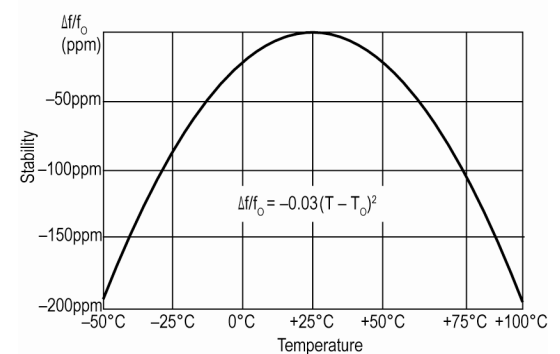
- Pack Style: Cutt In tape, cut from a reel  
Pack Size: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481-D  
Pack Size: 3,000



**Outline (mm)**



**Typical Frequency Stability Characteristics**



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**Electrical Specification - maximum limiting values**

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

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