

ISSUE 11; July 2016

### Description

- Industry standard package
- Suitable for real time clock applications
- Plastic encapsulated

### Frequency Parameters

- Frequency: 32.768kHz
- Frequency Tolerance:  $\pm 20.00\text{ppm}$
- Ageing:  $\pm 5\text{ppm max per year @ } 25^\circ\text{C}$

### Electrical Parameters

- Load Capacitance (CL): 6.0pF to 12.5pF
- Shunt Capacitance (C0): 1pF typ
- Drive Level: 1.0 $\mu\text{W max}$

### Operating Temperature Ranges

- 40 to 85°C

### Environmental Parameters

- Operable Temperature Range: -40 to 85°C
- Storage Temperature Range: -55 to 125°C
- Drop: 75cm drop (3 times) onto hard wooden board
- Vibration: 1.5mm amplitude, 10Hz-60Hz, 2-3mins in 3 mutually perpendicular planes, duration 2hrs each plane

### Ordering Information

- Frequency\*  
Model\*  
Tolerance @25°C  
Load Capacitance\*
- Example  
32.768kHz 90SMX  
20/-/+12.5

### Compliance

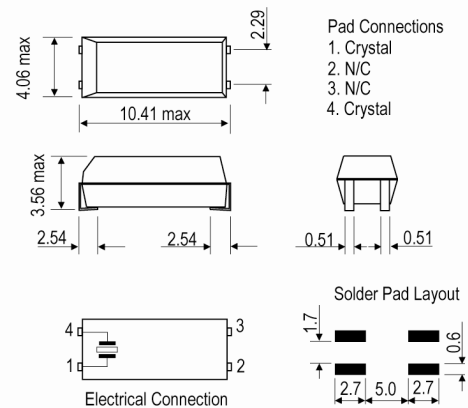
- RoHS Status (2011/65/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

### Packaging Details

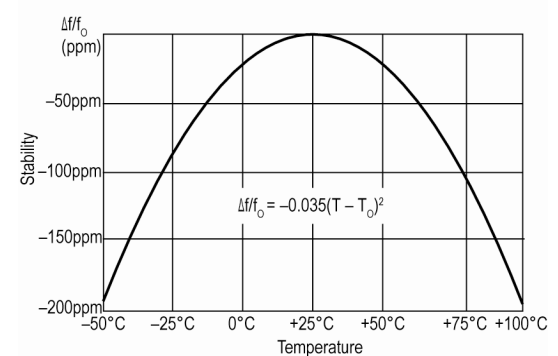
- Pack Style: Reel: Tape & reel in accordance with EIA-481-D  
Pack Size: 2,000
- Pack Style: Cutt: In tape, cut from a reel  
Pack Size: 1
- Pack Style: Bulk: Loose in bulk pack  
Pack Size: 100



### Outline (mm)



### Typical Frequency Stability Characteristics



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Electrical Specification - maximum limiting values

Frequency	Temperature Range	Stability (Min)	Over Tone Order	ESR
	°C	ppm		Ω
32.768000kHz	-40 to 85	-	Fundamental	50,000

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