

90SMX & 91SMX CRYSTALS

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Description

- Industry standard package
- Suitable for real time clock applications
- Plastic encapsulated
- Stock parts listed at the beginning of this chapter

General Specifications

- Load Capacitance (C_L): 6pF and 12.5pF
- Drive Level: 1.0μW max
- Ageing ±5ppm max per year at 25°C
- Shunt Capacitance (C_0): 1pF typ

Standard Frequency Tolerance

- ±20ppm

Operable Temperature Range

- -40 to 85°C

Storage Temperature Range

- -55 to 125°C

Environmental

- 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

Packaging

- Loose in bulk pack, 100pcs per bag
- Tape and reel in accordance with EIA-481-D, 2kpcs per reel (please see pages 372 & 373)

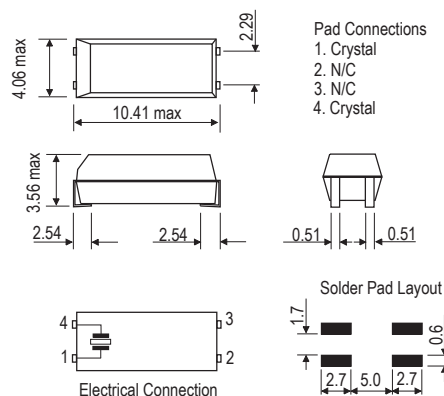
Ordering Information (*minimum required)

- Frequency*
- Model*
- Tolerance @25°C
- Load Capacitance*

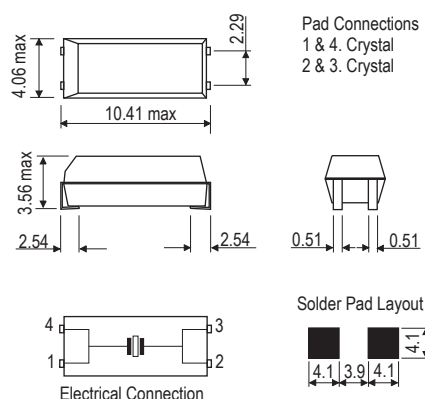
Example

- 32.768kHz 90SMX
20/-/12.5

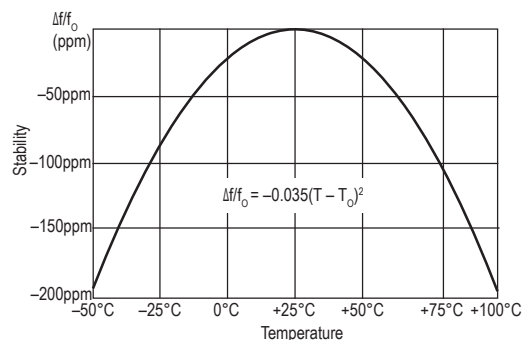
Outline (mm) 90SMX



Outline (mm) 91SMX



Typical Frequency Stability Characteristic





Electrical Specifications – maximum limiting values

Frequency Range	Frequency Tolerance @25°C ±2°C	Operable Temperature Range	Typical Frequency Stability Coefficient	ESR Max	Vibration Mode
32.7680kHz	±20ppm	-40 to 85°C	-0.035/°C ²	50kΩ	Tuning Fork

