

90SMX & 91SMX CRYSTALS

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Holder Style

- Plastic encapsulated

General Specifications

- Load Capacitance (CL): 6pF and 12.5pF standard
- Drive Level: 1.0µW max
- Ageing ±5ppm max per year at 25°C

Packaging

- Loose in bulk pack or tape and reel

Standard Frequency Tolerance

- ±20ppm

Operable Temperature Range

- 40 to 85°C

Storage Temperature Range

- 55 to 125°C

Environmental Specification

- Drop Shock: 75cm drop (3 times) onto hard wooden board
- Vibration: 1.5mm amplitude, 10Hz–60Hz, 2–3min in 3 directions (X, Y, Z axis) duration 2 hours each axis.

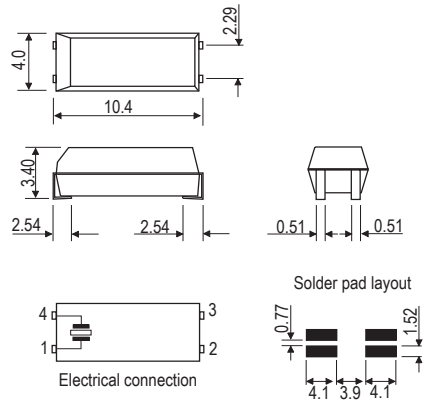
Marking

- Frequency Indicator + Date Code

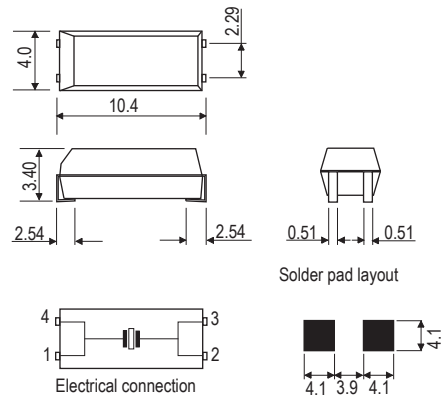
Minimum Order Information Required

- Frequency + Holder + Circuit Condition

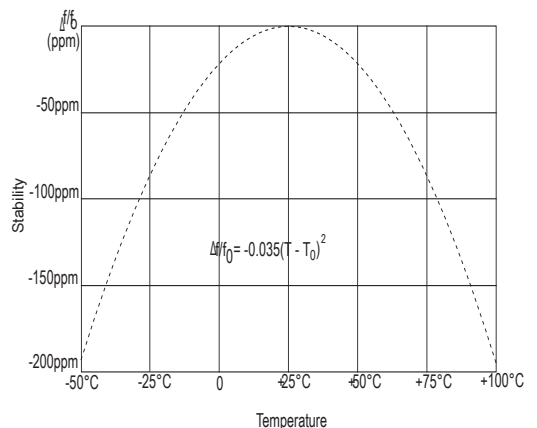
Outline (mm) 90SMX



Outline (mm) 91SMX



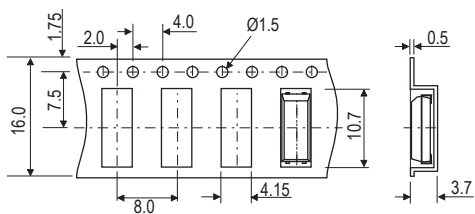
Typical Frequency Stability Characteristic



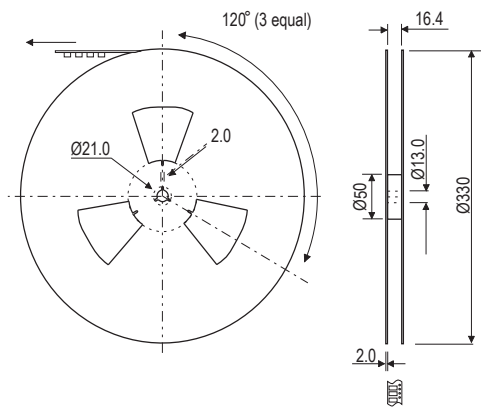
Electrical Specifications – maximum limiting values

Frequency Range	Frequency Tolerance @25°C ±2°C	Operating Temperature Range	Typical Frequency Stability Coefficient	ESR	Vibration
32.7680kHz	±20ppm	-40 to 85°C	-0.035/°C ²	50kΩ	Fundamental

Tape (mm)



Reel (mm)



QUARTZ
CRYSTALS