

# 85SMX CRYSTALS

ISSUE 8; 19 NOVEMBER 2008 - RoHS 2002/95/EC

## 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
- Shunt Capacitance (CO): 1pF typ

## 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: 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

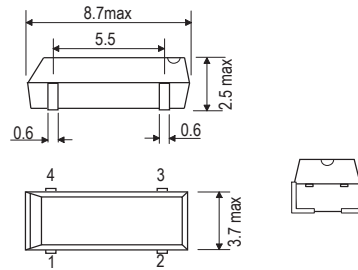
## Marking

- Includes Frequency

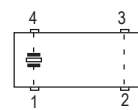
## Minimum Order Information Required

- Frequency + Holder + Circuit Condition

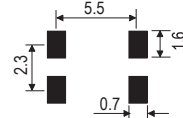
## Outline (mm)



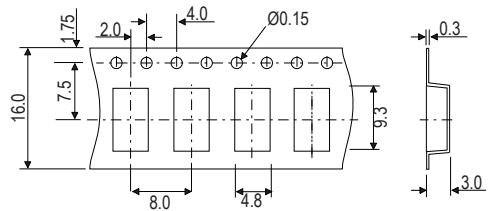
## Electrical Connection



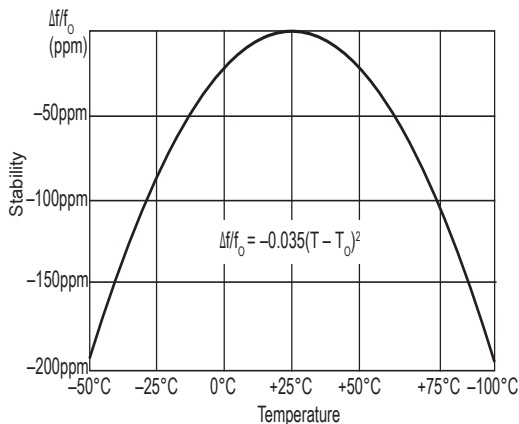
## Solder pad layout



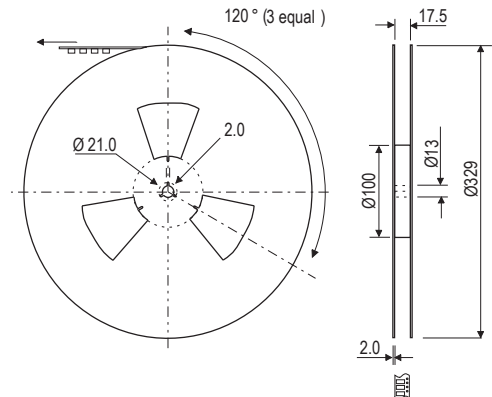
## Tape (mm)



## Typical Frequency Stability Characteristic



## Reel (mm)



**Electrical Specifications – maximum limiting values**

Frequency Range	Frequency Tolerance @ 25°C ±5°C	Operating Temperature Range	Typical Frequency Stability Coefficient	ESR	Vibration
32.7680kHz	±20ppm	-40 to 85°C	-0.035/°C <sup>2</sup>	50kΩ	Fundamental

QUARTZ  
CRYSTALS