

Crystal Specification

Model: 4SMX

ISSUE 8; July 2012 - RoHS 2011/65/EU

Description

 Quartz crystal in a ceramic package with a resin sealed ceramic lid, hermetically sealed

Not recommended for new designs For alternative see model CFPX-225

Frequency Range

■ Frequency
 ■ Frequency Stability
 ■ Frequency Tolerance
 ±50.00ppm
 ■ 50ppm

General Specification

■ Load Capacitance (CL) 10.0pF to 75.0pF or Series

■ Drive Level 100µW max

■ Ageing ±5ppm max per year @ 25°C

■ Shunt Capacitance (C0) 7pF max

Operating Temperature Ranges

■ -10 to 60°C

Environmental Parameters

- Storage Temperature Range: -40 to 85°C
- Shock: MIL-STD-202F, Method 213B: 1000G, 0.5ms
- Vibration: MIL-STD-202F, Method 204D, Test Condition D: 20G (10Hz-2000Hz), 4hrs in 3 mutually perpendicular planes (total 12hrs)

Ordering Information

■ Frequency*

Model*

Frequency Tolerance (@25°C)

Frequency Stability (over operating temperature range)

Operating Temperature Range

Load Capacitance*

Fundamental or Overtone AT cut*

(*minimum required)

■ Example

20.0MHz 4SMX

50/50/-10 to 60C/30 FUND

 Note: For other frequency/specification combinations please contact our sales offices

Packing Details

■ Pack Style: **Bulk** Loose in bulk pack

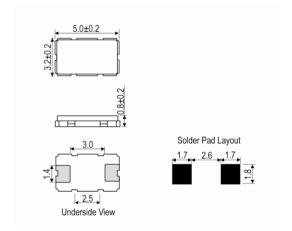
Pack Size 100

■ Pack Style: Reel Tape and reel in accordance with EIA-481-D

Pack Size 1,000
■ Alternative packing options available



Outline (mm)



Sales Office Contact Details:

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Electrical Specification - maximum limiting values

Frequency Range	Frequency Tolerance	Stability		Temperature Range	ESR Max	Vibration Mode
		Min	Max			
8.0 to <9.0MHz	±50ppm to ±50ppm	±50ppm	±50ppm	-10 to 60°C	300Ω	Fundamental
9.0 to <10.0MHz	±50ppm to ±50ppm	±50ppm	±50ppm	-10 to 60°C	200Ω	Fundamental
10.0 to <12.0MHz	±50ppm to ±50ppm	±50ppm	±50ppm	-10 to 60°C	80Ω	Fundamental
12.0 to <16.0MHz	±50ppm to ±50ppm	±50ppm	±50ppm	-10 to 60°C	60Ω	Fundamental
16.0 to <50.0MHz	±50ppm to ±50ppm	±50ppm	±50ppm	-10 to 60°C	40Ω	Fundamental
50.0 to <150.0MHz	±50ppm to ±50ppm	±50ppm	±50ppm	-10 to 60°C	80Ω	3RD Overtone

This document was correct at the time of printing; please contact your local sales office for the latest version

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