

CX-1-SM Crystals 8.0MHz to 160.0MHz

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Delivery Options

- Please contact our sales office for current leadtimes

Description

- Statek's CX-1-SM quartz crystals are designed for surface mounting on printed circuit boards or hybrid substrates

Holder Style

- CX-1-SM: hermetically sealed ceramic package

Terminations

- SM1 - gold plated
- SM2 - nickel solder plated
- SM3 - nickel solder plated, solder dipped

Methods of Attachment

- Vapour phase, wave solder, infrared or silver epoxy

General Specifications

- Load Capacitance (C_L) 20pF
Other values available upon request
- Static Capacitance (C_0): 2.0pF to 3.5pF
- Drive Level: 500 μ W max.
- Ageing: ± 5 ppm maximum first year

Standard Frequency Tolerance*

- ± 100 ppm, ± 1000 ppm, ± 10000 ppm
*Tighter tolerances available upon request

Operating Temperature Ranges

- -10 to 70°C = C
- -40 to 85°C = I
- -55 to 125°C = M

Storage Temperature Range

- -55 to 125°C

Environmental Specification *

- Shock: 3000g, 0.3ms $1/2$ sine
- Vibration: 20g rms, 10 to 2000Hz random
* Higher specifications available on request.

Solder Conditions

- For typical soldering conditions, please see the relevant pages in the Application Notes

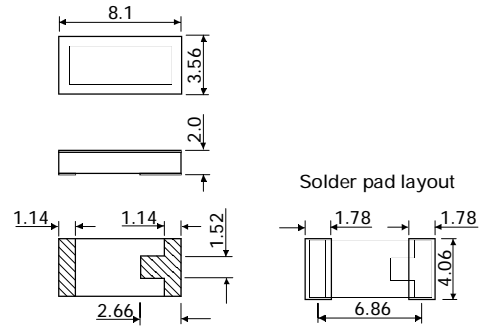
Marking

- Includes Frequency

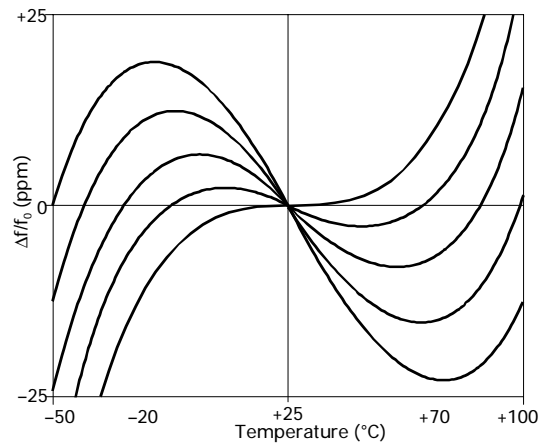
Minimum Order Information Required

- Frequency + Model + Termination + Frequency Tolerance @ 25°C + Frequency Stability + Operating Temperature Range + Circuit Condition

Outline in mm



Frequency Temperature Curve

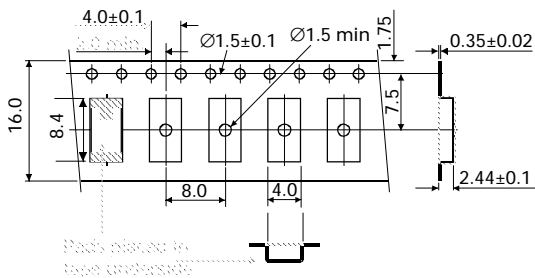


Electrical Specification – maximum limiting values

Frequency Range	*Frequency Tolerance @ 25°C ±2°C	Operating Temperature Range	Frequency Stability Available Over Operating Temperature		ESR max.	Vibration Mode
			Minimum	Maximum		
8.0 to < 9.0MHz	A = ±100ppm	-10 to 70°C	±10ppm	±100ppm	300Ω	Fundamental AT cut
	B = ±1000ppm	-40 to 85°C	±20ppm	±100ppm		
	C = ±10000ppm	-55 to 125°C	±30ppm	±300ppm		
9.0 to < 11.0MHz	A = ±100ppm	-10 to 70°C	±10ppm	±100ppm	200Ω	Fundamental AT cut
	B = ±1000ppm	-40 to 85°C	±20ppm	±100ppm		
	C = ±10000ppm	-55 to 125°C	±30ppm	±300ppm		
11.0 to < 14.0MHz	A = ±100ppm	-10 to 70°C	±10ppm	±100ppm	100Ω	Fundamental AT cut
	B = ±1000ppm	-40 to 85°C	±20ppm	±100ppm		
	C = ±10000ppm	-55 to 125°C	±30ppm	±300ppm		
14.0 to < 20.0MHz	A = ±100ppm	-10 to 70°C	±10ppm	±100ppm	70Ω	Fundamental AT cut
	B = ±1000ppm	-40 to 85°C	±20ppm	±100ppm		
	C = ±10000ppm	-55 to 125°C	±30ppm	±300ppm		
20.0 to < 70.0MHz	A = ±100ppm	-10 to 70°C	±10ppm	±100ppm	50Ω	Fundamental AT cut
	B = ±1000ppm	-40 to 85°C	±20ppm	±100ppm		
	C = ±10000ppm	-55 to 125°C	±30ppm	±300ppm		
48.0 to < 160.0MHz	A = ±100ppm	-10 to 70°C	±10ppm	±100ppm	80Ω	3rd Overtone
	B = ±1000ppm	-40 to 85°C	±20ppm	±100ppm		
	C = ±10000ppm	-55 to 125°C	±30ppm	±300ppm		

Ordering Example	10.0MHz CX-1 SM1 A 100ppm C 18pF
Frequency	_____
Model No	_____
Termination	_____
Frequency Tolerance @ 25°C	_____
Frequency Stability	_____
Operating Temperature Range: C = -10 to 70°C; I = -40 to 85°C; M = -55 to 125°C	_____
Load Capacitance (Circuit Condition) - if non-standard	_____
*Please note: other frequency tolerances are available on request	

Outline in mm - Tape



Outline in mm - Reel

