

CX-1-SM (8MHz to 250MHz)

ISSUE 7; 1 NOVEMBER 2008 – RoHS 2002/95/EC

Description

- Statek's CX-1-SM crystals are high quality chemically etched resonators manufactured with a photo lithographic process

Holder Style

- Hermetically sealed ceramic package with a glass or ceramic lid

Terminations

- SM1 - gold plated (lead free) – RoHS 2002/95/EC
- SM2 - nickel solder plated
- SM3 - nickel solder dipped
- SM4 - solder plated (lead free) – RoHS 2002/95/EC
- SM5 - solder dipped (lead free) – RoHS 2002/95/EC

Methods of Attachment

- Vapor phase, infrared or silver epoxy

General Specifications

- Load Capacitance (CL): 20pF < 50MHz, 10pF > 50MHz
Other values available upon request
- Static Capacitance (C0): 2.0pF to 3.5pF
- Drive Level: 500µW max for F<50MHz
200µW max for F>50MHz
- Ageing: ±5ppm maximum first year

Packaging

- Tray pack or tape and reel

Standard Frequency Tolerances*

- ±100ppm, ±1000ppm, ±10000ppm
*Tighter tolerances available on 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: 30000g, 0.3ms 1/2 sine
- Vibration: 20g rms, 10 to 2000Hz random

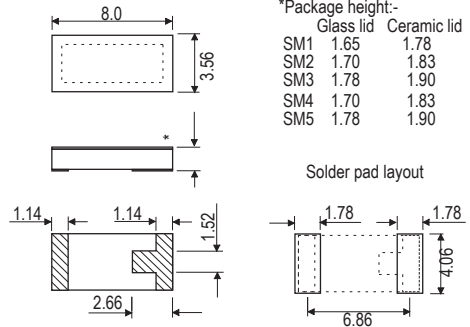
Marking Includes

- Frequency

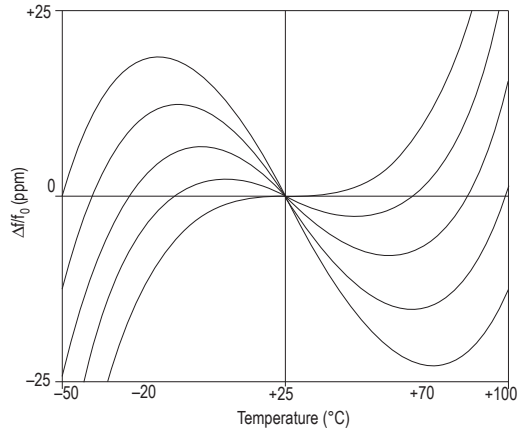
Minimum Order Information Required

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

Outline (mm)



Frequency Temperature Curve



Electrical Specifications – maximum limiting values

Frequency Range	Frequency Tolerance @25°C ±2°C	Operating Temperature Range	Frequency Stability Available Over Operating Temperature Range		Vibration Mode	Model Number
			Minimum	Maximum		
8.0 to 250.0MHz	±100ppm ±1000ppm ±10000ppm	-10 to 70°C	±10ppm	±100ppm	Fundamental AT cut	CX-1-SM
		-40 to 85°C	±20ppm			
		-55 to 125°C	±30ppm			
48.0 to 160.0MHz		-10 to 70°C	±10ppm		3rd Overtone	
		-40 to 85°C	±20ppm			
		-55 to 125°C	±30ppm			

QUARTZ CRYSTALS

Ordering Example 50.0MHz CX-1 OT C SM1 100 100 C 9pF

Frequency _____

Model No. _____

Blank = Fundamental; OT = 3rd Overtone _____

Blank = Glass lid; C = Ceramic Lid _____

Termination _____

Frequency Tolerance _____

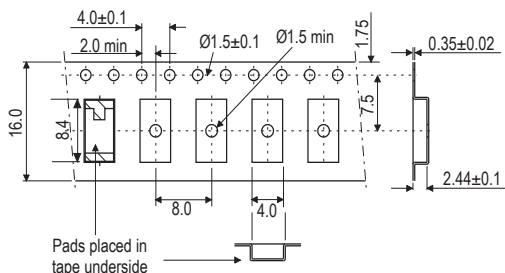
Frequency Stability _____

Operating Temperature Range: -10 to 70°C = C; -40 to 85°C = I; -55 to 125°C = M _____

Load Capacitance (Circuit Condition) - if non-standard _____

Please note: other frequency tolerances may be available upon request

Tape (mm)



Reel (mm)

