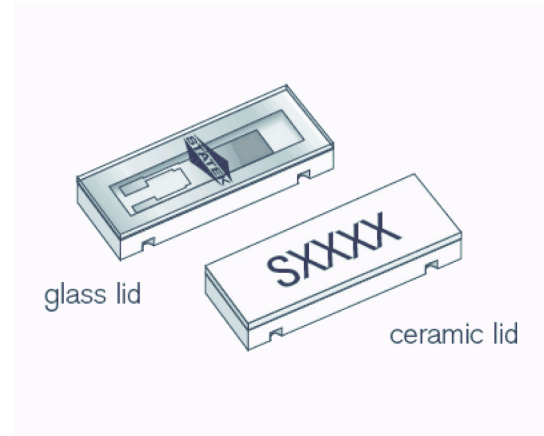


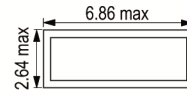
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**Description**

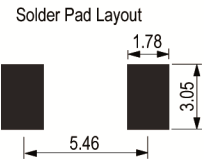
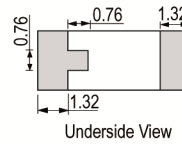
- This product is designed and manufactured by Statek Corporation in California, USA and distributed by IQD. STATEK's miniature CX3HG crystals in leadless ceramic packages are designed for surface mounting on printed circuit boards or hybrid substrates. These crystals are low profile and have a small land pattern. These rugged crystals are designed for applications requiring higher shock and vibration survival.
- 1-C-SM1 10000G, Gold plated (lead free) ceramic lid
- 1-C-SM4 10000G, Solder plated (lead free) ceramic lid
- 1-C-SM5 10000G, Solder dipped (lead free) ceramic lid
- 1-SM1 10000G, Gold plated (lead free) glass lid
- 1-SM4 10000G, Solder plated (lead free) glass lid
- 1-SM5 10000G, Solder dipped (lead free) glass lid
- 2-C-SM1 20000G, Gold plated (lead free) ceramic lid
- 2-C-SM4 20000G, Solder plated (lead free) ceramic lid
- 2-C-SM5 20000G, Solder dipped (lead free) ceramic lid
- 2-SM1 20000G, Gold plated (lead free) glass lid
- 2-SM4 20000G, Solder plated (lead free) glass lid
- 2-SM5 20000G, Solder dipped (lead free) glass lid
- Please note that all data is only valid at 25°C unless otherwise stated.



**Outline (mm) 1-C-SM1 = 10000G, Gold plated (lead free) ceramic lid**



	Height (H) =	
	Glass Lid	Ceramic Lid
SM1	1.35	1.70
SM2	1.40	1.75
SM3	1.47	1.83
SM4	1.40	1.75
SM5	1.47	1.83



**Frequency Parameters**

- Frequency: 9.6MHz to 250.0MHz
- Frequency Tolerance: ±100.00ppm
- Tolerance Condition: @ 25°C
- Frequency Stability: ±10.00ppm to ±100.00ppm
- Ageing: ±10ppm max in 1st year @ 25°C

**Electrical Parameters**

- Load Capacitance (CL): 10.0pF to 20.0pF
- Shunt Capacitance (C0): 2.3pF typ @ 32MHz
- Drive Level: 500µW max ≤50MHz, 200µW max >50MHz
- Fundamental Frequency: 10MHz    32MHz    155.52MHz
- Motional Resistance (Ω): 60        25        10
- Motional Capacitance (fF): 2.8       6.2       4.0
- Quality Factor (Q): 95        30        30
- Shunt Capacitance (pF): 1.4       2.3       2.3

**Operating Temperature Ranges**

- -10 to 70°C
- -40 to 85°C
- -55 to 125°C

**Environmental Parameters**

- Storage Temperature Range: -55 to 125°C
- Shock: Up to 20000G, 0.3ms, 1/2 sine
- Vibration: 20G, 10-2000Hz swept sine, MIL-STD-202G, Method 204D, Cond.D

**Manufacturing Details**

- Max Process Temperature: 260°C for 20sec

**Sales Office Contact Details:**

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**Ordering Information**

- SM1 Gold Plated (Lead free)  
SM2 Solder Plated  
SM3 Solder Dipped  
SM4 Solder Plated (Lead Free)  
SM5 Solder Dipped (Lead Free)
- Frequency\*  
Model\*  
Shock Level\*  
Termination Variant\*  
Lid Type\*  
Frequency Tolerance (@25°C)\*  
Frequency Stability (over operating temp range)\*  
Operating Temperature Range\*  
Load Capacitance
- Example:  
10.0MHz CX3HG1-SM1  
±100ppm ±100ppm -40 to 85C 20pF FUND

**Compliance**

- RoHS Status (2015/863/EU)      Optional
- REACH Status                              Compliant
- MSL Rating (JDEC-STD-033):      Not Applicable

**Packaging Details**

- Pack Style: Tray      Tray  
Pack Size: 1
- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000

**Electrical Specification - maximum limiting values**

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Over Tone Order	ESR
		°C	ppm		Ω
9.6MHz	250.0MHz	-10 to 70	±10	Fundamental	- 0
		-40 to 85	±20		- 0
		-55 to 125	±30		- 0

\*Stability Maximum values ±100ppm

*This document was correct at the time of printing; please contact your local sales office for the latest version.*  
[Click to view latest version on our website.](#)

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