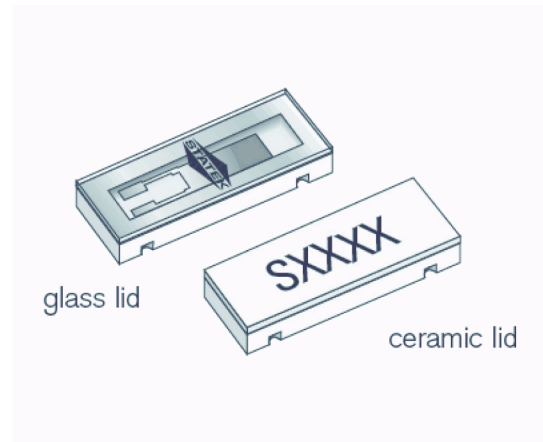


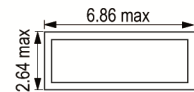
ISSUE 1; March 2016

**Description**

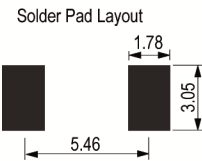
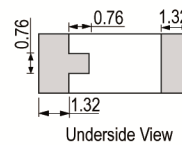
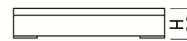
- STATEK's miniature CX3HG crystals in leadless ceramic packages are designed for surface mounting on printed circuit boards or hybrid substrates. These crystals are low profile and have a small land pattern. These rugged crystals are designed for applications requiring higher shock and vibration survival.
- 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 ±10pm 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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Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
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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 (2011/65/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	-
		-40 to 85	±20		-
		-55 to 125	±30		-

\*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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