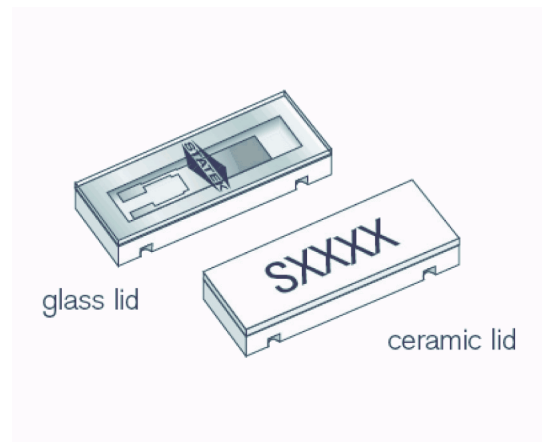


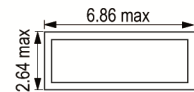
ISSUE 1; March 2016

Description

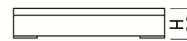
- STATEK's miniature CX3HG crystals in leadless ceramic packages are designed for surface mounting on printed circuit boards or hybrid substrates. These crystals are low profile and have a small land pattern. These rugged crystals are designed for applications requiring higher shock and vibration survival.
- 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.



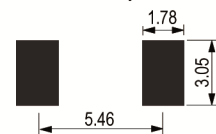
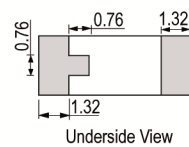
Outline (mm) 1-C-SM1 = 10000G, Gold plated (lead free) ceramic lid



	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



Solder Pad Layout



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:

UK: +44 (0)1460 270200

Germany: 0800 1808 443

France: 0800 901 383

USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

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.](#)

Sales Office Contact Details:

UK: +44 (0)1460 270200

France: 0800 901 383

Email: info@iqdfrequencyproducts.com

Germany: 0800 1808 443

USA: +1.760.318.2824

Web: www.iqdfrequencyproducts.com