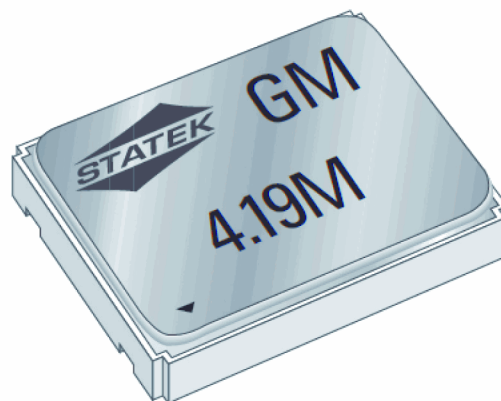


ISSUE 1; May 2016

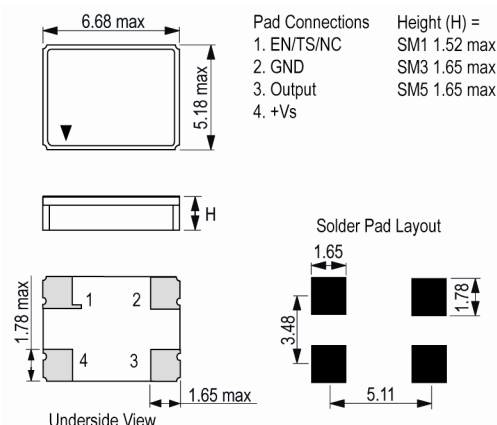


### Description

- Statek's surface-mount CXOMK oscillators consist of a Statek miniature quartz crystal and a CMOS/TTL compatible hybrid circuit in a ceramic package. Utilising the latest advancements in production technology, the CXOMK oscillator is capable of achieving tight frequency calibration tolerance and high stability over wide temperature ranges.
- HG-SM1 High G (Gold plated, RoHS compliant)
- HG-SM5 High G (Solder dipped, RoHS compliant)
- -SM1 (Gold plated, RoHS compliant)
- -SM5 (Solder dipped, RoHS compliant)
- FEATURES
  - CMOS and TTL compatible
  - Optional Output Enable/Disable with Tri-State
  - Low EMI emission
  - High shock resistance
  - Full military testing available
  - Hermetically sealed ceramic package
- APPLICATIONS
  - Military & Aerospace
  - Smart Munitions
  - Cockpit Systems
  - Navigation
  - Industrial, Computer & Communications
  - Industrial Controls
  - Instrumentation
  - Microprocessor Clocks
  - Medical
  - Infusion Pumps
- Please note that all data is only valid at 25°C unless otherwise stated.



**Outline (mm) -SM1 = (Gold plated, RoHS compliant)**



### Frequency Parameters

- Frequency 200.0kHz to 220.0MHz
- Frequency Tolerance ±30.00ppm
- Tolerance Condition @ 25°C
- Frequency Stability ±15.00ppm to ±100.00ppm
- Ageing ±10ppm max in 1st year @ 25°C

### Electrical Parameters

- Supply Voltage 3.0V ±10%
- Supply Voltage (absolute max rating): -0.5V to 7.0V
- Current consumption (typ @ 166MHz):
  - 15mA @ 2.7V
  - 18mA @ 3.0V
  - 20mA @ 3.3V
- Start-up Time: 5ms max

### Operating Temperature Ranges

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

### Output Details

- Output Compatibility CMOS
- Drive Capability 15pF

### 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](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

#### Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock:
  - Std: 5000G, 0.3ms, 1/2 sine
  - HG: 10000G, 0.3ms, 1/2 sine
- Vibration: MIL-STD-202G, Method 204D, Condition D: 20G, 10-2000Hz, swept sine  
Note: Random vibration testing also available, please contact our sales offices

#### Manufacturing Details

- Maximum process temperature: 260°C for 20 seconds

#### Ordering Information

- Frequency\*
- Model\*
- Termination Variant\*
- Output Compatibility\*
- Frequency Tolerance (@ 25°C)\*
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Supply Voltage
- Pad 1 Function\*
- (\*minimum required)
- Example  
40.0MHz CXOMK SM1  
CMOS ±30ppm ±50ppm -10 to 70C 3.0V TS

#### Compliance

- RoHS Status (2011/65/EU)      Compliant
- REACH Status                      Compliant
- MSL Rating (JDEC-STD-033):    Not Applicable

#### Packaging Details

- Pack Style: Tray      Supplied on a tray  
Pack Size: 1
- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- Pack Style: Bulk      Bulk pack  
Pack Size: 1

#### Electrical Specification - maximum limiting values 3.0V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
200.0kHz	220.0MHz	-10 to 70	±15.0	-	6	40/60%
		-40 to 85	±30.0	-	6	40/60%
		-55 to 125	±40.0	-	6	40/60%

*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  
Germany: 0800 1808 443

France: 0800 901 383  
USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)  
Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)