



# Crystal Clock Oscillator Specification CXOMK 1.8V

### 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

# **Frequency Parameters**

■ Frequency 200.0kHz to 220.0MHz

Frequency Tolerance ±30.00ppmTolerance Condition @ 25°C

■ Frequency Stability ±15.00ppm to ±100.00ppm

Ageing ±10ppm max in 1st year @

25°C

# **Electrical Parameters**

Supply Voltage 1.8V ±10%

Supply Voltage (absolute max rating): -0.5V to 4.0V

Current consumption (typ @ 166MHz):

15mA @ 2.7V

18mA @ 3.0V

20mA @ 3.3V

Start-up Time: 5ms max

# **Operating Temperature Ranges**

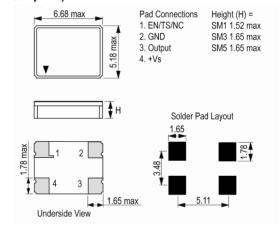
- -10 to 70°C
- -40 to 85°C
- -55 to 125°C

#### **Output Details**

Output Compatability CMOSDrive Capability 15pF



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



### **Sales Office Contact Details:**

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### **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 1.8V TS

#### Compliance

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

### **Packaging Details**

Pack Style: Reel
 Tape & reel in accordance with EIA-481-D

Pack Size: 1.000

■ Pack Style: Bulk Bulk pack

Pack Size: 1

■ Pack Style: Tray Supplied on a tray

Pack Size: 1

### Electrical Specification - maximum limiting values 1.8V ±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.

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