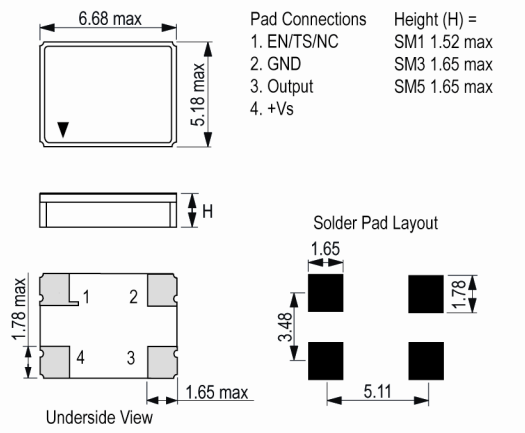
Crystal Clock Oscillator Specification
CXOMK 3.3V

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 3.3V ±10%
- Supply Voltage (absolute max rating): -0.5V to 7.0V
- Supply Current (typical)
  2mA @ 10 MHz
  4mA @ 24 MHz
  6mA @ 30 MHz
  8mA @ 40 MHz
  10mA @ 50MHz
- Start-up Time: 5ms max

Operating Temperature Ranges

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

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Output Details

- Output Compatability CMOS
- Drive Capability 15pF

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 3.3V TS

Compliance

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

Packaging Details

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

Electrical Specification - maximum limiting values 3.3V ±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.
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