

ISSUE 1; April 2016

### Description

- Technological advancements permit 2.5 x 2.0mm CXOQ quartz oscillator to have design-in capabilities of withstanding high shock applications. Additionally, the ultra miniature CXOQ takes advantage of Statek's well known reliability and impeccable quality.
- SM1 SM1 Gold Plated (RoHS compliant)
- SM5 SM5 Solder Dipped (RoHS compliant)
- Please note that all data is only valid at 25°C unless otherwise stated.

### Frequency Parameters

- |                     |                         |
|---------------------|-------------------------|
| Frequency           | 400.0kHz to 100.0MHz    |
| Frequency Tolerance | ±30.00ppm to ±100.00ppm |
| Frequency Stability | ±50.00ppm to ±100.00ppm |
| Ageing              | ±5ppm max in 1st year   |

### Electrical Parameters

- |  |               |
|--|---------------|
| Supply Voltage                         | 2.5V ±10%     |
| Supply Current (typical):              |               |
| 3mA @ 24MHz                            |               |
| 5mA @ 32MHz                            |               |
| 6mA @ 50MHz                            |               |
| Absolute Maximum Supply Voltage Range: | -0.5V to 5.0V |

### Operating Temperature Ranges

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

### Output Details

- |                      |      |
|----------------------|------|
| Output Compatibility | CMOS |
| Drive Capability     | 15pF |

### Output Control

- Start-Up Tme: 5ms max

### Environmental Parameters

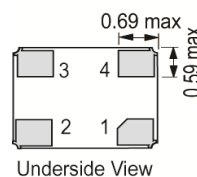
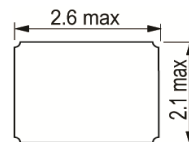
- APPLICATIONS:
  - Military
  - Medical
  - Industrial
- Shock: 5000G, 0.3ms, 1/2 sine
- Vibration: 20G, 10-2000Hz, swept sine per MIL-STD-202G, Method 204D, Condition D
- Storage Temperature Range: -55 to 125°C

### Manufacturing Details

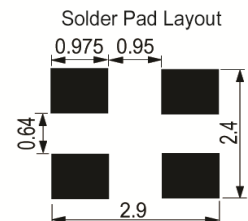
- Termination Variants:
  - SM1 = Gold Plated (RoHS compliant)
  - SM3 = Solder Dipped (non RoHS compliant)
  - SM5 = Solder Dipped (RoHS compliant)
- Maximum Process Temperature: 260°C for 20 seconds max



### Outline (mm) -SM1 = SM1 Gold Plated (RoHS compliant)



- |                 |              |
|-----------------|--------------|
| Pad Connections | Height (H) = |
| 1. EN/NC        | SM1 1.0 max  |
| 2. GND & Lid    | SM3 1.22 max |
| 3. Output       | SM5 1.22 max |
| 4. +Vs          |              |



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### Ordering Information

- (\*minimum required):
  - Frequency\*
  - Model\*
  - Supply Voltage
  - Termination Variant\*
  - Frequency Tolerance (@25°C)\*
  - Frequency Stability (over operating temperature range)\*
  - Operating Temperature Range
- Example:
  - 10.0MHz CXOQ 2.5V SM1
  - CMOS ±100ppm ±100ppm -40 to 85C NC

### Compliance

- RoHS Status (2011/65/EU)      Optional
- 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

### Electrical Specification - maximum limiting values 2.5V ±10%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
400.0kHz	100.0MHz	-10 to 70	±50.0	-	10	45/55%
		-40 to 85	±100.0	-	10	45/55%
		-55 to 125	±100.0	-	10	45/55%

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