

ISSUE 1; January 2016

### Description

- Statek's LSC oscillators, designed especially for applications requiring low power consumption, as low as 500nA, consist of a Statek miniature Tuning Fork quartz crystal and a CMOS compatible hybrid circuit in a ceramic package.
- SM1 Gold Plated (RoHS)
- SM5 Solder Dipped (RoHS)
- Please note that all data is only valid at 25°C unless otherwise stated.

### Frequency Parameters

- Frequency: 30.0kHz to 200.0kHz
- Frequency Tolerance:  $\pm 100.00\text{ppm}$
- Tolerance Condition: @ 25°C
- Ageing:  $\pm 3\text{ppm}$  max per year
- Frequency Stability (-10 to 70°):  $\pm 70\text{ppm}$  typ,  $\pm 100\text{ppm}$  max
- Supply Voltage Variation ( $\pm 10\%$ ):  $\pm 1\text{ppm/V}$  typ,  $\pm 3\text{ppm/V}$  max
- Load Variation ( $\pm 10\%$  change):  $\pm 1\text{ppm}$  max

### Electrical Parameters

- Supply Voltage: 3.3V  $\pm 10\%$
- Absolute Maximum Supply Voltage Range: -0.5V to 7V

### Operating Temperature Ranges

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

### Output Details

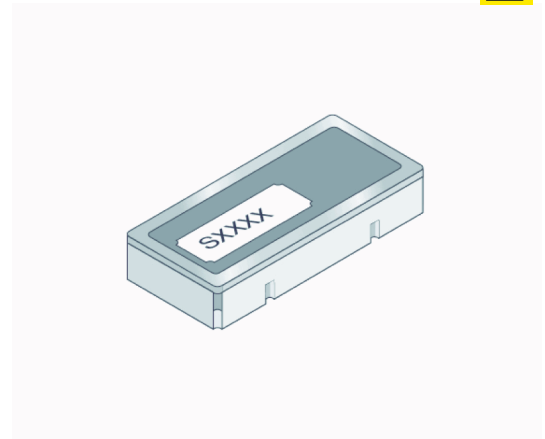
- Output Compatibility: CMOS
- Drive Capability: 10pF//10M $\Omega$
- Output Levels:
  - VoH 4.8V min
  - VoL 0.2V max

### Environmental Parameters

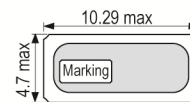
- Storage Temperature Range: -55 to 125°C
- Shock: Up to 1000G, 1ms, 1/2 sine ( $\pm 3\text{ppm}$  max)
- Vibration: 10G rms, 10-2000Hz ( $\pm 3\text{ppm}$  max)

### Manufacturing Details

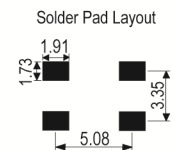
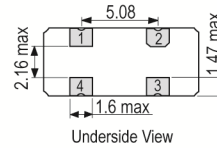
- Process Temperature: 260°C for 20sec max



Outline (mm) SM1 = Gold Plated (RoHS)



- Pad Connections
1. Tri-State or N/C
  2. GND
  3. Output
  4. +V<sub>S</sub>



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### Ordering Information

- Frequency  
Model\*  
Supply Voltage\*  
Termination Variant\*  
Pad 1 Function\*  
Frequency Tolerance  
Operating Temperature Range\*
- Terminations:  
SM1 - Gold (RoHS)  
SM3 - Solder Dipped (non RoHS)  
SM5 - Solder Dipped (RoHS)
- Example:  
100.0kHz LSC 3.3V-SM1  
TS ±100ppm -10 to 70C

### Compliance

- RoHS Status (2011/65/EU)      Optional
- REACH Status                      Compliant
- 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: Tray      Tray pack  
Pack Size: 100

### 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	%
30.00kHz	200.0kHz	-10 to 70	-	0.01	50	40/60%
		-40 to 85	-	0.01	50	40/60%
		-55 to 125	-	0.01	50	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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