



LSM OSCILLATOR

30 kHz to 200 kHz

Low Power Surface Mount Crystal Oscillator

DESCRIPTION

The LSM oscillator has the highest accuracy, stability and lowest current of all STATEK surface mount oscillators. The design consists of a hermetically-sealed CX-4 STATEK crystal, and a CMOS-compatible integrated circuit. The hybrid design is hermetically-sealed with a kovar lid in a surface mount ceramic package. Permanent precision tuning of the oscillator is accomplished by laser trimming the crystal.

FEATURES

- Low power consumption
- Low aging
- CMOS compatible
- Double hermetically sealed package
- Full military testing available
- 3.3 Volt operation available
- Optional Tri-State
- Low harmonic noise

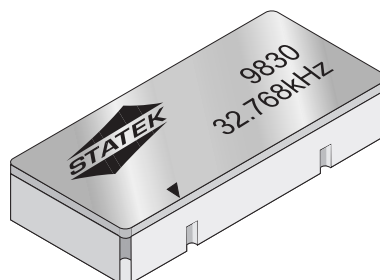
APPLICATIONS

Industrial, Computer & Communications

- General purpose clock oscillator
- Data logger
- Remote sensor
- Real Time Clock
- Medical test and diagnostics

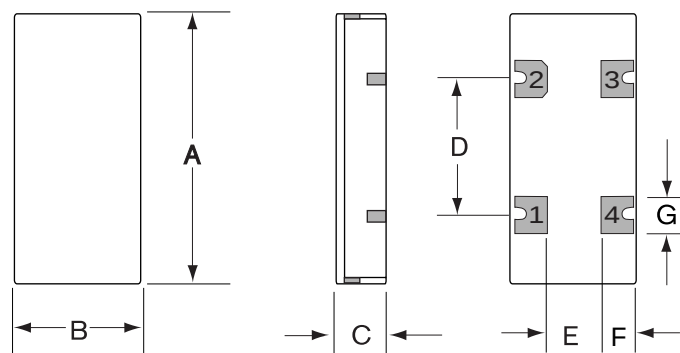
Military

- Portable field communication
- Military high speed modem
- Flight recorder



actual size
side view

PACKAGE DIMENSIONS

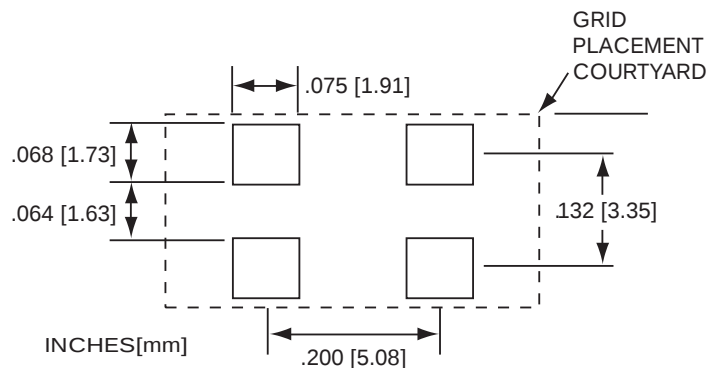


DIM	TYP.		MAX.	
	INCHES	mm	INCHES	mm
A	.400	10.16	.405	10.29
B	.180	4.57	.185	4.70
C*	.071	1.80	.079	2.00
D	.200	5.08	.205	5.21
E	.080	2.03	.085	2.16
F	.050	1.27	.058	1.47
G	.055	1.40	.063	1.60

Termination material is Au over Ni (SM1), solder dip (SM3) also available.

*SM1 Termination; SM3 = .084 in. (2.13mm) Max.

SUGGESTED LAND PATTERN



10151 - Rev B

Specifications are typical at 25°C unless otherwise noted.
Specifications are subject to change without notice.

* Contact the factory for lower voltage.
 ** Tighter tolerances available.
 *** Does not include calibration tolerance. Positive variations small compared to negative variations (See data sheet 10103).
 **** Contact the factory for other frequencies.

V _{DD} (Volts)	Current (uA)
2	4.5
3	5.5
4	6.5
5	8.0
6	10.0
7	12.0

Supply Voltage V_{DD}	-0.3V to 7V
Storage Temperature	-55°C to +125°C
Process Temperature	260°C 20 sec.

All parameters are measured at ambient temperature with a 10M Ω and 10pF load at 5V.

<u>Pin</u>	<u>Connection</u>
1	Output Enable or NC
2	Ground
3	Output
4	V _{DD}

LSM -Tray Pack (Standard)
 -16mm tape, 7" or 13" reels (Optional)
 Per EIA 481 (see data sheet 10109)

* Of V_{DD}

LSM	3	S	T	SM3	32.768 kHz	(	A	/	I	)
3=3.3V Blank=5V (Std.)	"S" if special or custom design. Blank if Std.	*T = Tri-State Blank = Pin 1 no connection	Blank= SM1 (Std.) SM1 = Gold Plated SM3 = Solder Dipped	Frequency			**Calibration Tolerance @ 25°C (A) (B)		Temp. Range: C = Commercial I = Industrial M = Military S = Specify	

10151 - Rev B