

# **CXOLAT OSCILLATOR**

32.768 kHz

Ultra-Low Power/Fast Start-Up/Ultra-Miniature

#### **DESCRIPTION**

The CXOXLAT 32.768 kHz oscillator achieves the low power comparable with a tuning fork design and the fast start-up and tight frequency stability attained by an AT cut crystal design. Designed for applications requiring ultralow current (15  $\mu$ A), fast start-up time (15 ms), and a tight frequency stability ( $\pm$ 30 ppm to  $\pm$ 100 ppm) over a wide temperature range (-55°C to +125°C). These oscillators are also capable of withstanding significantly higher shock than a standard tuning fork design.

## **FEATURES**

- Ultra-low current (typical 15 μA)
- Fast start-up (typical 15 ms)
- Tight tolerance
- High shock resistance
- Low aging
- CMOS output
- Optional Output Enable/Disable with Tri-State
- Hermetically sealed ceramic package
- Full military testing available
- Designed and manufactured in the USA

#### **APPLICATIONS**

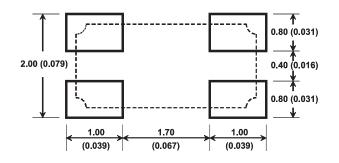
# Military, Aerospace & Avionics

- Communications
- Navigation
- **GPS**

### Industrial, Computer & Communications

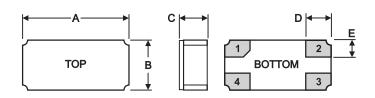
- Handheld instrumentation
- Transponder/Animal migration

# SUGGESTED LAND PATTERN





### **DIMENSIONS**



|         | TYPICAL |      | MAXIMUM |      |
|---------|---------|------|---------|------|
| DIM     | inches  | mm   | inches  | mm   |
| Α       | 0.126   | 3.20 | 0.130   | 3.30 |
| В       | 0.059   | 1.50 | 0.063   | 1.60 |
| C (SM1) | 0.037   | 0.95 | 0.039   | 1.00 |
| D       | 0.029   | 0.75 | 0.030   | 0.77 |
| Е       | 0.020   | 0.50 | 0.021   | 0.52 |
|         |         |      |         |      |

## PIN CONNECTIONS

- 1. Output
- 2. Ground
- 3. Output Enable/Disable (E) or no connection (N)
- 4. V<sub>DD</sub>

