32.768 kHz

High Temperature/Ultra-Low Power/Fast Start-Up/High Shock

DESCRIPTION

The CXOXULPHT 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 ultra-low current (55 µA), fast start-up time (2 ms), and a tight frequency stability (200 ppm) for high temperature operation up to +200°C. These oscillators are also capable of withstanding significantly higher shock than a standard tuning fork design.

FEATURES

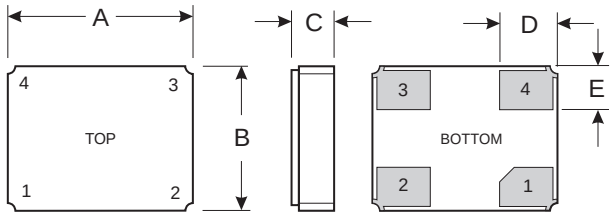
- **High temperature operation up to +200°C**
- **Ultra-low current (typical 55 µA)**
- **Fast start-up (typical 2 ms)**
- **High shock resistance up to 10,000 g**
- Low aging
- CMOS output
- Optional Output Enable/Disable with Tri-State
- Low EMI emission
- Hermetically sealed ceramic package
- Full military testing available
- Designed and manufactured in the USA

APPLICATIONS

Industrial

- Downhole instrumentation
- Rotary shaft sensors
- Underground boring tools

DIMENSIONS

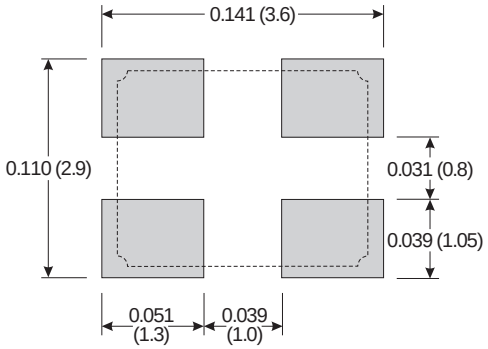


	TYPICAL		MAXIMUM	
DIM	inches	mm	inches	mm
A	0.126	3.20	0.136	3.40
B	0.099	2.50	0.107	2.70
C (SM1)	0.039	1.00	0.043	1.09
C (SM3/SM5)	0.044	1.12	0.048	1.21
D	0.040	1.00	0.041	1.10
E	0.030	0.75	0.031	0.85

PIN CONNECTIONS

1. Output Enable/Disable (E) or no connection (N)
2. Ground
3. Output
4. V_{DD}

SUGGESTED LAND PATTERN



inches (mm)