



Features and Benefits

- High temperature operation up to 175°C
- High shock resistance
- Hermetically sealed ceramic package

Typical Applications

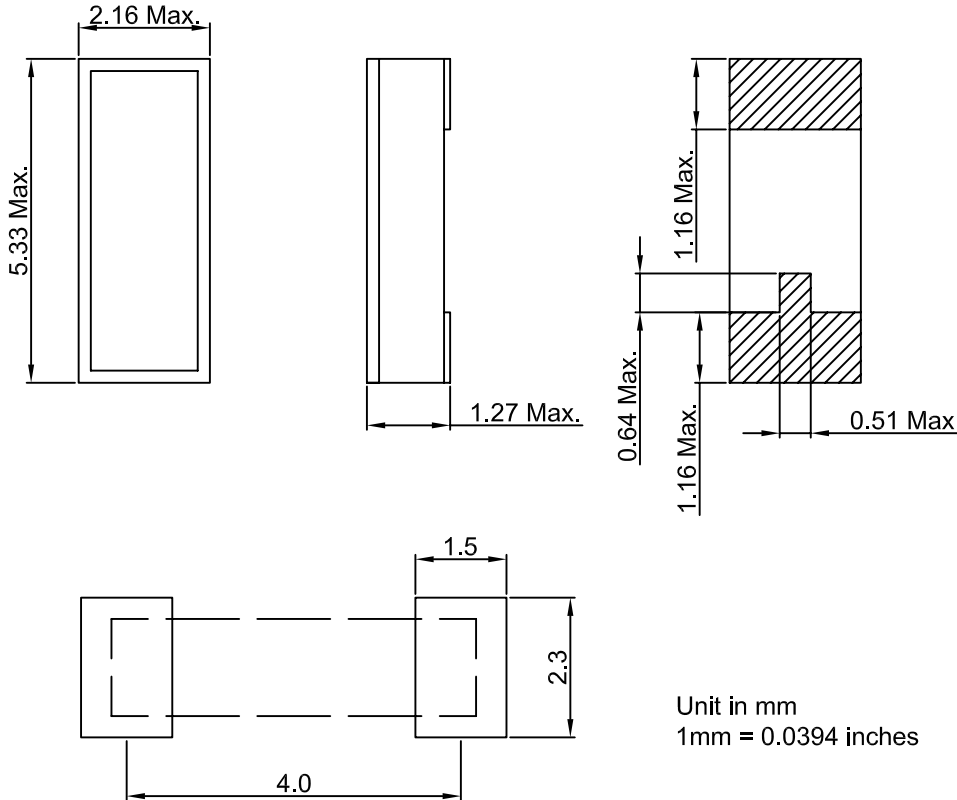
- Downhole instrumentation
- Rotary shaft sensors
- Underground boring tools

Description

HTXTAL5200CA-32.768KHz is designed to operate at temperatures up to and including 175°C and feature an expected life in excess of 1,000 hours at these temperatures.

Mechanical Drawing & Pin Connections

Drawing No: MD200032-1



Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F			32.768		KHz	
Load Capacitance	CL			9		pF	
Shunt Capacitance	C0			1.1		pF	
Drive Level					0.5	uW	
Motional Resistance	R1			70		Kohm	
Motional Capacitance	C1			2.3		fF	
Quality Factor				31K			
Turnover Temperature				23		°C	
Typical Motional Resistance at	R1	150°C		100		Kohm	
	R1	175°C		125		Kohm	
Frequency Stability							
Calibration Tolerance		(at 25°C)		±100ppm		ppm	
Aging		@+25°C 1st year		±5		ppm	
Environmental Conditions							
Operating temperature		0°C to +175°C					
Shock, survival		5,000 g, 0.3 ms, 0.5 sine					