

Tuning Forks

Features

- ▶ *Low Cost*
- ▶ *Ready to use - no cylindrical can packaging to remove*
- ▶ *Compatible with MadPLL™*
- ▶ *Two sizes available - medium and large*
- ▶ *Also available with tungsten tips attached.*

Applications

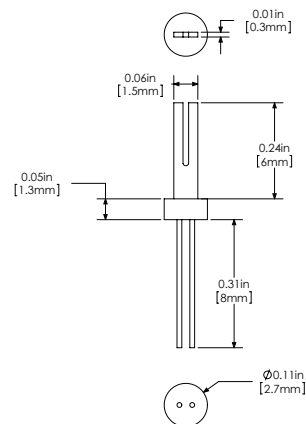
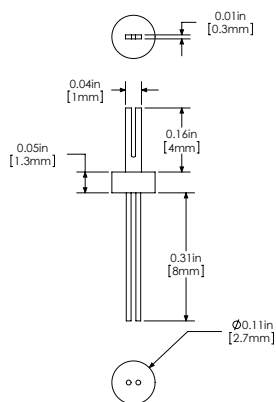
- ▶ *Atomic Force Microscopy (AFM)*
- ▶ *Near-field Scanning Optical Microscope (NSOM)*



Product Description

Mad City Labs offers quartz crystal tuning forks for scanning probe microscopy applications such as atomic force microscopy (AFM) and near field scanning optical microscopy (NSOM). Each tuning fork has two electrical leads for connection to a driving oscillator such as the Mad City Labs MadPLL™ instant AFM and nanoprobe instrumentation package. Our tuning forks are available in two sizes, and are shipped to you conveniently ready to use - “out of the can” - with the typical cylindrical housing removed. Bare tuning forks available in boxes of 20, tuning forks with tungsten tips available in boxes of 8.

Electrical Specifications	
Center Frequency	32.768 kHz
Oscillation Mode	Fundamental
Series Resistance (max.)	30 kΩ
Tolerance (@ 25 °C)	± 18 ppm
Operating Temperature Range	-10°C to +60°C
Frequency Stability over Temperature	-0.038 ppm/°C
Drive Level	10 μW
Shunt Capacitance (max.)	1.7 pF
Motional Capacitance	2.5 fF
Load Capacitance	12.5 pF
Aging (max.)	± 3 ppm/year



Tuning Fork -
Medium

Dimensions are in INCHES
Drawing No.
TFM.10.A

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Tuning Fork -
Large

Dimensions are in INCHES
Drawing No.
TFL.10.A

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