

# SMD Tuning Fork



Model: FX145

RoHS Compliant / Pb Free

Rev. 5/17/2005

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[http://www.foxonline.com/need\\_a\\_sample.htm](http://www.foxonline.com/need_a_sample.htm)

Need a Sample®

## FEATURES

- Ultra Low Profile
- 0.9mm Height
- Long Term Stability
- Tape and Reel (3,000 pcs. STD)

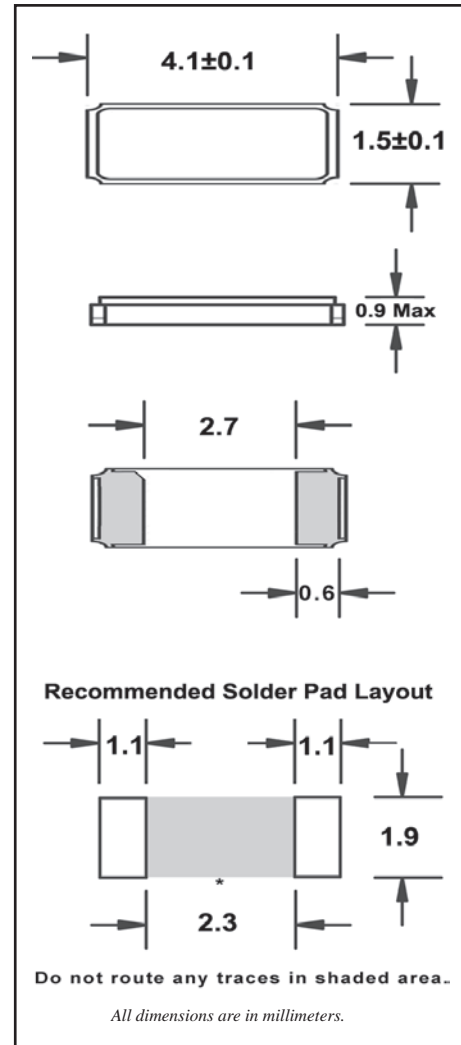
## • PART NUMBER [Learn More](#) - Internet Required

Part Number	Model Number	Frequency Stability	Operating Temperature	Frequency
740-0.032768-xxxxx	FX145	-0.04PPM/( $\Delta^{\circ}\text{C}$ ) <sup>2</sup>	-40 ~ +85 °C	32.768 kHz

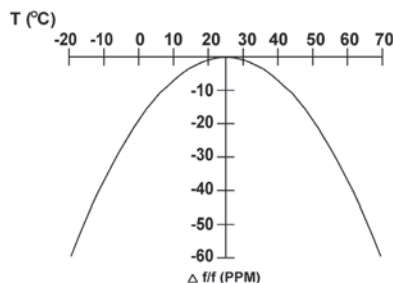
## • STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency	32.768 kHz
Frequency Tolerance @ 25°C	±20 PPM
Frequency Stability Temperature Coefficient	-0.04 PPM / ( $\Delta^{\circ}\text{C}$ ) <sup>2</sup>
Temperature Range	
Turnover (TO)	+20°C ~ +30°C
Operating (TOPR)	-40°C ~ +85°C
Storage (TSTG)	-55°C ~ +125°C
Equivalent Series Resistance (RS)	70 k $\Omega$
Load Capacitance (CL)	12.5 pF (Standard) Others available
Insulation Resistance @ 100VDC	500 M $\Omega$ Min
Drive Level	1.0 $\mu\text{W}$
Aging per year	±5 PPM
Reflow Soldering Temperature	260°C x 10 Seconds (2 Cycles)
Moisture Sensitivity Level (MSL)	1
Termination Finish	Ni/Au

All specifications subject to change without notice. Rev. 5/17/05



**Parabolic Temperature Curve**



To determine frequency stability, use parabolic curvature (K).  
For example: What is stability at 45°C?

- 1) Change in T (°C) = 45-25 = 20°C
- 2) Change in frequency = -0.04 PPM \* ( $\Delta\text{C}$ )<sup>2</sup>  
= -0.04 PPM \* (20)<sup>2</sup>  
= -16.0 PPM