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## Product Change Notification

**PCN Publish Date:** 01/11/2012

**PCN#:** 385

**Change Title:** Product Dimension Changes

### Products Affected:

Model Number	Part Number
NC38LF	300LF-0.032768-*****

### Description of Change to the Customer:

Change pin diameter from  $0.3\pm 0.07\text{mm}$  to  $0.38\pm 0.05\text{mm}$ .

Change pin center to center spacing from  $1.1\pm 0.2\text{mm}$  to  $0.8\pm 0.1\text{mm}$ .

Change package diameter from 3.0mm typical to 3.2mm Max

See drawing markup on following page.

**Reason for Change:** To bring dimensions in line with current factory specifications.

**Schedule of Change:** Change is effective immediately.

**Customer Impact and Response:** We sincerely hope this change will have minimal impact on our customers. If you have any questions, please contact Fox Technical Support at [www.foxonline.com/email.htm](http://www.foxonline.com/email.htm) or call 239-693-0099.



# Thru-Hole Tuning Fork

Model: NC15LF/NC26LF/NC38LF

RoHS Compliant / pB Free

Rev. 7/23/2010

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

## FEATURES

- Miniature Packages
- Low Cost
- Cold Weld Design
- Long Term Stability
- Tight Tolerance

Need a Sample®

[Click to view mounting precautions](#)

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

Part Number	Model Number	Frequency Stability	Operating Temperature	Frequency
298LF-Frequency-xxxxx	NC15LF	-0.04 PPM / (Δ°C) <sup>2</sup>	-20 °C~ +60 °C	32.768 kHz
299LF-Frequency-xxxxx	NC26LF	-0.04 PPM / (Δ°C) <sup>2</sup>	-20 °C~ +60 °C	32.768 kHz
300LF-Frequency-xxxxx	NC38LF	-0.04 PPM / (Δ°C) <sup>2</sup>	-20 °C~ +60 °C	32.768 kHz

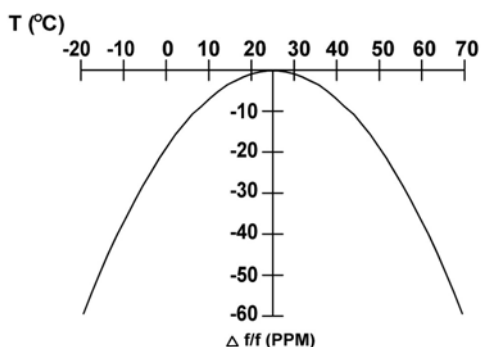
## • STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency	32.768 kHz
Frequency Tolerance @ 25°C	± 20 PPM
Frequency Stability Temperature Coefficient	-0.04 PPM / (Δ°C) <sup>2</sup>
Temperature Range	
Turnover (T <sub>O</sub> )	+20°C ~ +30°C
Operating (T <sub>OPR</sub> )	-20°C ~ +60°C
Storage (T <sub>STG</sub> )	-30°C ~ +70°C
Equivalent Series Resistance (R <sub>S</sub> )	
NC15 / NC26	50 kΩ
NC38	35 kΩ
Load Capacitance (C <sub>L</sub> )	12.5 pF (Standard) 6 pF (Optional)
Insulation Resistance @ 100VDC	500 MΩ Min
Drive Level	1.0 μW
Aging per year	±3 PPM

All specifications subject to change without notice.

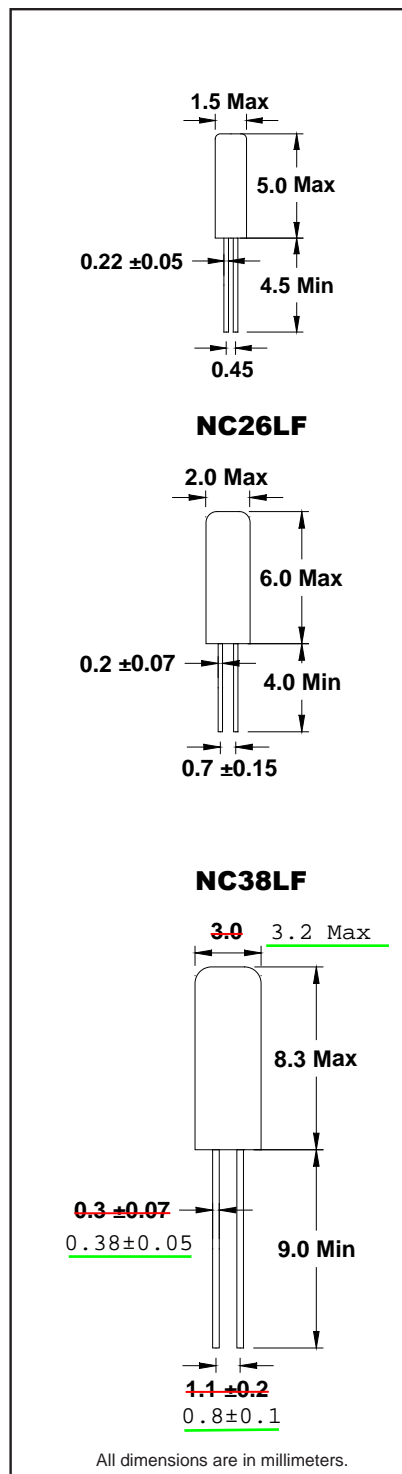
Note: Can should not be soldered to the circuit board or grounded. If securing the can to the board is desired, a rubber adhesive is recommended.

### 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 \* (Δ C)<sup>2</sup>  
= -0.04 PPM \* (20)<sup>2</sup>  
= -16.0 PPM



All dimensions are in millimeters.