

FEATURES

- Extremely Small Size
- Low Cost
- 1.4mm Height Max
- Tape and Reel (3,000 pcs. STD)

Quote it!

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

Part Number	Model Number	Frequency Stability	Operating Temperature	Frequency
501-Frequency-xxxxx	FSX	-0.04PPM/($\Delta^\circ\text{C}$) ²	-40 ~ +85 $^\circ\text{C}$	32.768 kHz



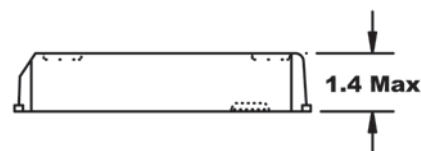
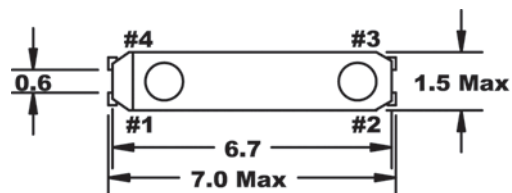
Learn more about:
[Part Marking Identification](#)
[Tape and Reel Specification](#)

Internet required

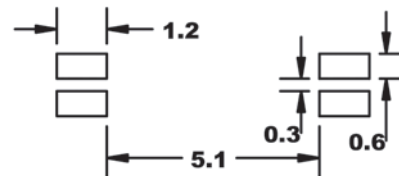
• STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	32.768 kHz
Frequency Tolerance @ 25 $^\circ\text{C}$	± 20 PPM
Frequency Stability, ref @ 25 $^\circ\text{C}$	-0.04PPM/($\Delta^\circ\text{C}$) ²
Temperature Range	
Turnover (To)	+20 $^\circ\text{C}$ ~ +30 $^\circ\text{C}$
Operating (TOPR)	-40 $^\circ\text{C}$ ~ +85 $^\circ\text{C}$
Storage (TSTG)	-55 $^\circ\text{C}$ ~ +125 $^\circ\text{C}$
Equivalent Series Resistance	65 k Ω
Load Capacitance (CL)	7 pF, 12.5pF Typ
Insulation Resistance @ 100V _{DC}	500 M Ω Min
Drive Level	1.0 μW
Aging	± 3 PPM

All specifications subject to change without notice. Rev. 7/12/04

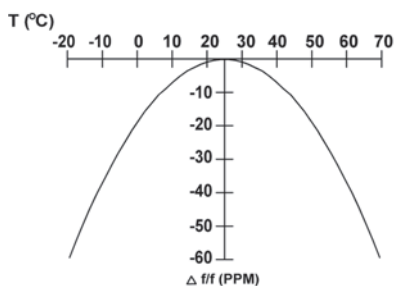


Recommended Solder Pad Layout



All dimensions are in millimeters.

Parabolic Temperature Curve



To determine frequency stability, use parabolic curvature (K).
 For example: What is stability at 45 $^\circ\text{C}$?

- 1) Change in T ($^\circ\text{C}$) = 45-25 = 20 $^\circ\text{C}$
- 2) Change in frequency = -0.04 PPM * ($\Delta^\circ\text{C}$)²
 = -0.04 PPM * (20)²
 = -16.0 PPM