

SMD 3.2x1.5mm Tuning Fork



Model: FX135

RoHS Compliant / Pb Free

Rev. 2/2/2006 Preliminary

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Need a Sample®

FEATURES

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

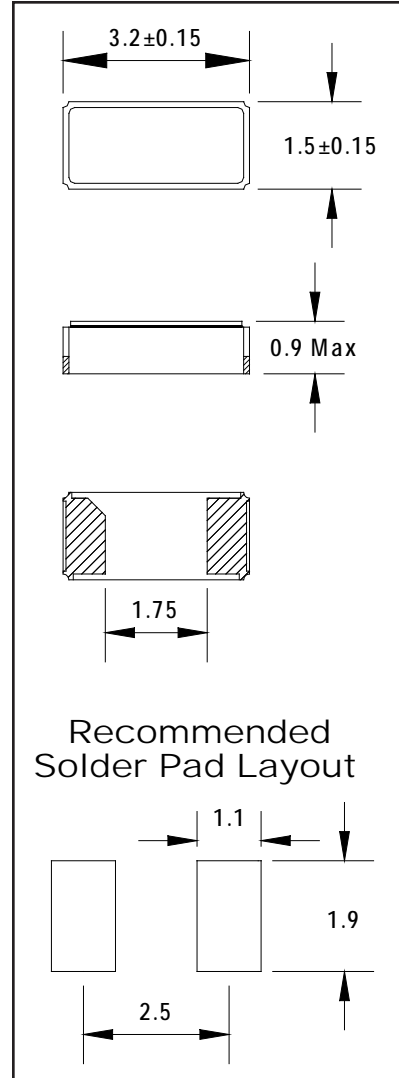
• PART NUMBER [Learn More](#) - Internet Required

| Part Number | Model Number | Frequency Stability | Operating Temperature | Frequency |
|---------------------|--------------|---|---|------------|
| 739-Frequency-xxxxx | FX135 | -0.045PPM/($\Delta^{\circ}\text{C}$) ² | -40 $^{\circ}\text{C}$ ~ +85 $^{\circ}\text{C}$ | 32.768 kHz |

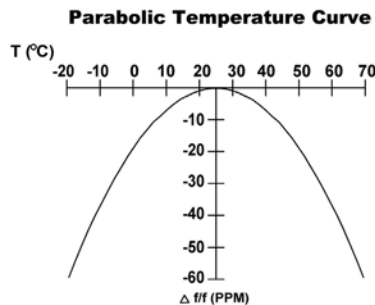
• STANDARD SPECIFICATIONS

| PARAMETERS | MAX (unless otherwise noted) |
|---|---|
| Frequency | 32.768 kHz |
| Frequency Tolerance @ 25 $^{\circ}\text{C}$ | ± 20 PPM |
| Frequency Stability Temperature Coefficient | -0.045 PPM / ($\Delta^{\circ}\text{C}$) 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 (RS) | 70 k Ω |
| Load Capacitance (CL) | 12.5 pF(Standard) (Fox P/N: FX135A-327) 9pF (Optional) (Fox P/N: FX135B-327) |
| Insulation Resistance @ 100VDC | 500M Ω Min |
| Drive Level | 1.0uW 0.1uW Typ |
| Aging per year | ± 3 PPM |
| Maximum Soldering Temp / Time | 260 $^{\circ}\text{C}$ / 10 Seconds |
| Moisture Sensitivity Level (MSL) | 1 |
| Termination Finish | Ni/Au |

All specifications subject to change without notice.



All dimensions are in millimeters.



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

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• TAPE SPECIFICATIONS (millimeters)

| MODEL | A | B | C | D | E | F | STD Reel QTY |
|-------|------|-----|-----|-----|-----|------|--------------|
| FX135 | ∅1.5 | 4.0 | 4.0 | 3.5 | 8.0 | 0.85 | 3,000 |

• REEL SPECIFICATIONS (millimeters)

| MODEL | G | H | I | J | K | L | M |
|-------|-----|-----|-----|-----|------|---|-----|
| FX135 | 2.0 | ∅13 | ∅21 | ∅60 | ∅180 | 9 | 1.6 |

