

The miniature ECX-71 is a very compact SMD Tuning Fork Crystal. The 7 x 1.5 x 1.4 mm plastic package is ideal for commercial and industrial applications.

ECX-71 SMD CRYSTAL

Request a Sample

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS



- Low Profile
- 7 x 1.5 mm Footprint
- Extended Temp. Range
- RoHS Compliant
- Low Power RTC Applications such as STM32 [AN2867](#)

| PARAMETERS | CONDITIONS | ECX-71 | | | UNITS |
|------------------------------|----------------|--------|--------|--------|---------------------|
| | | MIN | TYP | MAX | |
| Frequency | Fo | | 32.768 | | KHz |
| Frequency Tolerance | @ +25°C | | | ± 20 | ppm |
| Load Capacitance | Specify in P/N | | 12.5 | | pF |
| Drive Level | DL | | 0.1 | 1.0 | µW |
| Equivalent Series Resistance | R1 | | | 65K | Ω |
| Turnover Temperature | | +20 | +25 | +30 | °C |
| Temperature Coefficient | | -0.025 | -0.035 | -0.045 | ppm/°C ² |
| Shunt Capacitance | Co | | 0.8 | | pF |
| Aging (First Year) | @ +25°C ±3°C | | | ±3 | ppm |
| Operating Temperature | Topr | -40 | | +85 | °C |
| Storage Temperature | Tstg | -55 | | +125 | °C |

DIMENSIONS (mm)

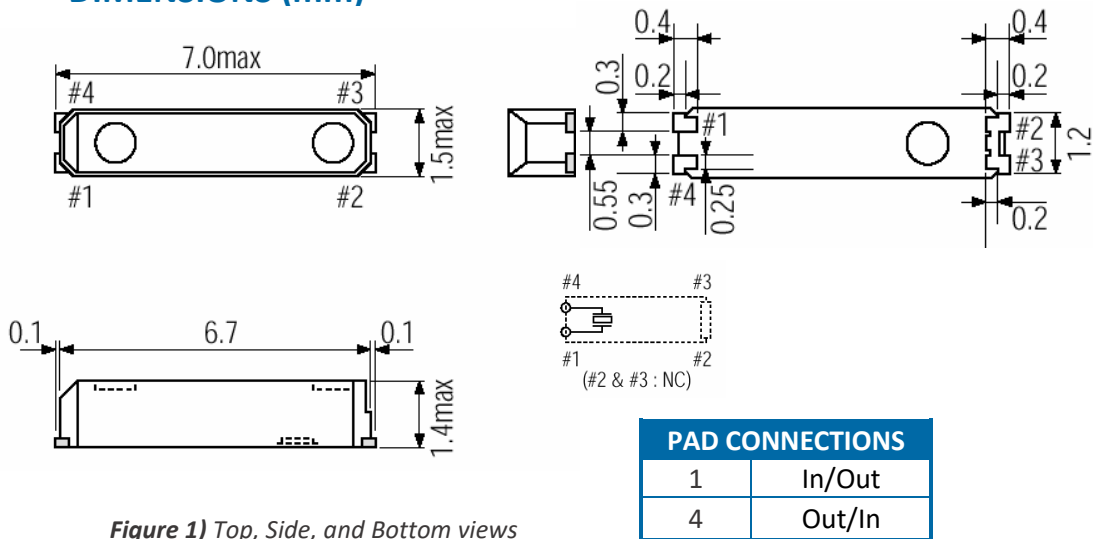


Figure 1) Top, Side, and Bottom views

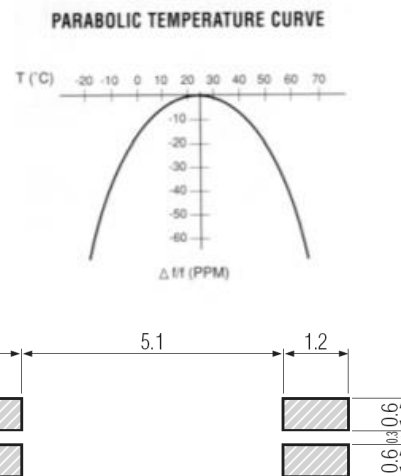
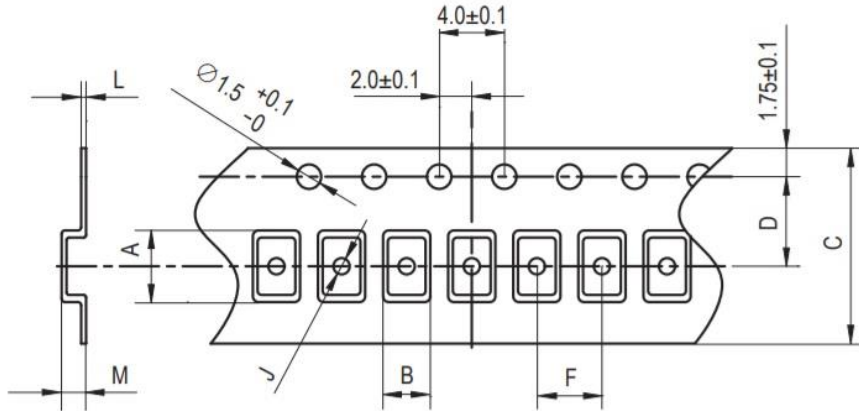


Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE: Example ECS-.327-12.5-38-TR

| ECS - FREQUENCY ABBREVIATION | LOAD CAPACITANCE | PACKAGE | PACKAGING |
|------------------------------|-------------------------------------------------------------------------|--------------|-----------------------------|
| ECS | .327 = 32.768 KHz 12.5 = 12.5 pF 9 = 9 pF 7 = 7 pF 6 = 6 pF | -38 = ECX-71 | TR = Tape & Reel 3K/Reel |

POCKET TAPE DIMENSIONS (mm)



| A | B | C | D | F | J | L | M | Reel Dia. | Qty/Reel |
|-----|------|------|-----|-----|-----|-----|-----|-----------|----------|
| 7.2 | 1.55 | 16.0 | 7.5 | 4.0 | 1.0 | 0.3 | 1.5 | 180 | 3000pcs |

| SOLDER PROFILE | |
|-----------------------------------------|--|
| Peak solder Temp +260°C Max 10 sec Max. | |
| 2 Cycles Max. | |
| MSL 1, Lead Finish Sn | |

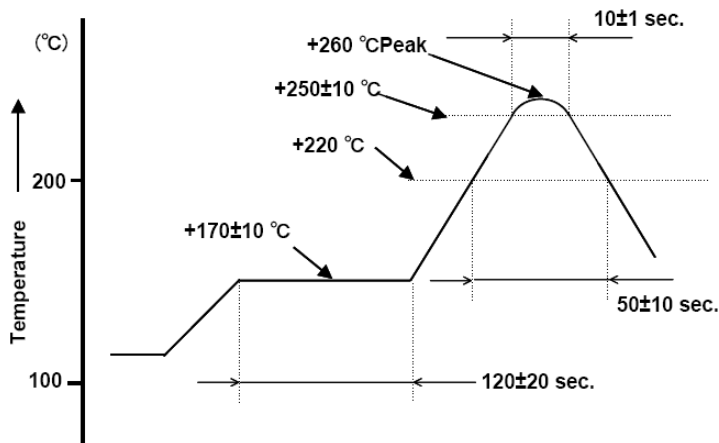


Figure 1) Suggested Reflow Profile