



**THE DATASHEET OF
ECS-.327-12.5-17X-C-TR**



The ECX-306X is a compact SMD Tuning Fork Crystal. The 3.8 x 8.0 x 2.5 mm package is ideal for communications and measuring equipment.

Request a Sample



- Low Profile
- Long Term Stability
- Industry Standard Footprint
- Extended Temp. Range
- RoHS Compliant
- Low Power RTC Applications such as STM32 [AN2867](#)

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS | CONDITIONS | ECX-306X | | | 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 | | | 1.0 | μW |
| Equivalent Series Resistance | R1 | | | 50K | Ω |
| Turnover Temperature | | +20 | +25 | +30 | °C |
| Temperature Coefficient | | -0.028 | -0.034 | -0.040 | ppm/°C ² |
| Shunt Capacitance | Co | | 1.35 | | pF |
| Aging (First Year) | @ +25°C ±3°C | | | ±3 | ppm |
| Operating Temperature | Topr | -40 | | +85 | °C |
| Storage Temperature | Tstg | -55 | | +125 | °C |
| Insulation Resistance | @ 100V DC | 500M | | | Ω |

DIMENSIONS (mm)

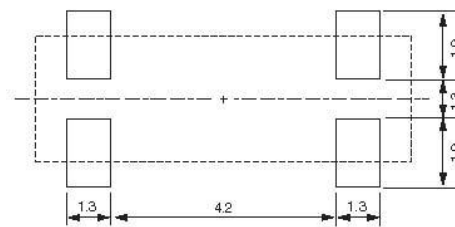
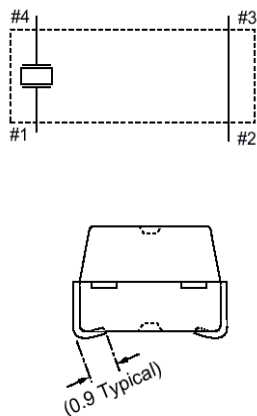
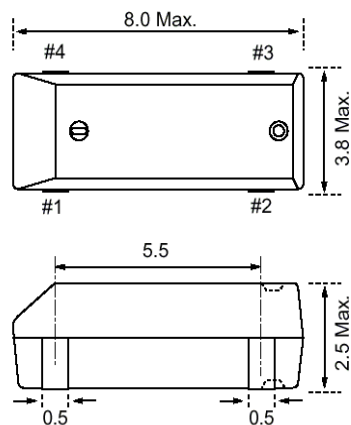


Figure 2) Suggested Land Pattern

Figure 1) Top, Side, and End views

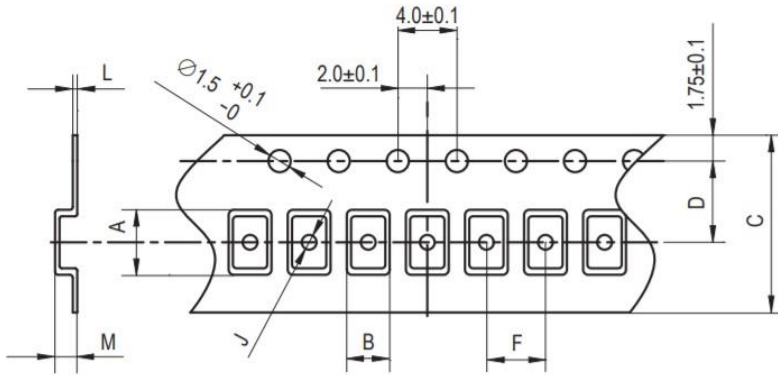
PART NUMBERING GUIDE: Example ECS-.327-12.5-17X-TR

| ECS - FREQUENCY ABBREVIATION | LOAD CAPACITANCE | PACKAGE | CUSTOM OPTIONS Tolerance | PACKAGING |
|------------------------------|---|----------------|---|-----------------------------|
| ECS | .327 = 32.768 KHz 12.5 = 12.5 pF 9 = 9 pF 7 = 7 pF 6 = 6 pF | 17X = ECX-306X | Blank (Std) = ±20 ppm * C = ± 10 ppm | TR = Tape & Reel 3K/Reel |

*Contact ECS for availability

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POCKET TAPE DIMENSIONS (mm)



| A | B | C | D | F | J | L | M | Reel Dia. | Qty/Reel |
|-----|-----|------|-----|-----|-----|-----|-----|-----------|----------|
| 8.3 | 4.0 | 16.0 | 7.5 | 8.0 | 1.6 | 0.3 | 2.7 | 330 | 3000pcs |

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

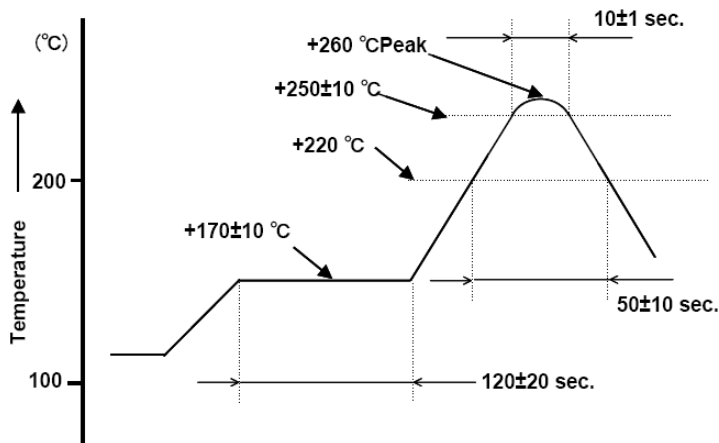




Figure 1) Suggested Reflow Profile

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View ECS-.327-12.5-17X-C-TR on WIN SOURCE](#)
-  [ECS Inc. Information](#)

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