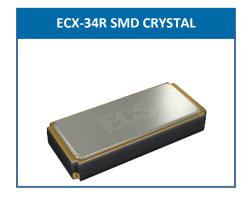


## ECX-34R SMD CRYSTAL

Request a Sample



The ultra-miniature ECX-34R is a very compact SMD Tuning Fork Crystal with a Max. Low ESR of 50K  $\Omega$ . The 3.2 x 1.5 x 0.9 mm ceramic package is ideal for mobile deivces, real time clocks, and wireless applications.

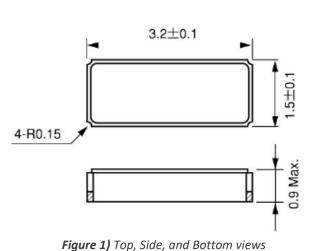


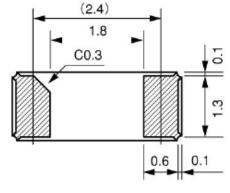
- Low Profile
- 50K Max. ESR
- 3.2 x 1.5 mm Footprint
- Extended Temp. Range
- RoHS Compliant
- Low Power RTC Applications such as STM32 AN2867

## **OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

| PARAMETERS                   | CONDITIONS           | ECX-34R |        | UNITS  |         |
|------------------------------|----------------------|---------|--------|--------|---------|
|                              |                      | MIN     | ТҮР    | MAX    |         |
| Frequency                    | Fo                   |         | 32.768 |        | KHz     |
| Frequency Tolerance          | @ +25°C              |         |        | ± 20 * | ppm     |
| Temperature Coefficient      |                      | -0.028  | -0.034 | -0.040 | ppm/°C² |
| Shunt Capacitance            | Со                   | Co 1.3  |        |        | pF      |
| Load Capacitance             | Specify in P/N       |         | 12.5   |        | pF      |
| Drive Level                  | DL                   |         |        | 0.5    | μW      |
| Equivalent Series Resistance | R1                   |         |        | 50K    | Ω       |
| Insulation Resistance        | @ 100V DC            | 500M    |        |        | Ω       |
| Turnover Temperature         | ·                    |         | +25    | +30    | °C      |
| Operating Temperature        |                      |         |        | +85    | °C      |
| Storage Temperature          | age Temperature Tstg |         |        | +125   | °C      |
| Aging (First Year)           | @ +25°C ±3°C         |         |        | ±3     | ppm     |

### **DIMENSIONS (mm)**





| PAD CONNECTIONS |        |  |  |  |
|-----------------|--------|--|--|--|
| 1               | In/Out |  |  |  |
| 2               | Out/In |  |  |  |

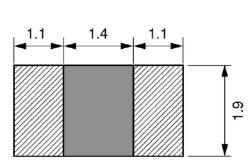


Figure 2) Suggested Land Pattern

#### PART NUMBERING GUIDE: Fxample FCS-.327-12 5-34R-TR

| '.' | ART NOWIDERING GOIDE. I      | -xample LCSS        | 27-12.5-5 <del>4</del> 1-111 |                           |           |
|-----|------------------------------|---------------------|------------------------------|---------------------------|-----------|
|     | ECS - FREQUENCY ABBREVIATION | LOAD<br>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 -34R = ECX-34R

Blank =  $\pm 20$  ppm \* C =  $\pm 10$  ppm

TR = Tape & Reel 3K/Reel

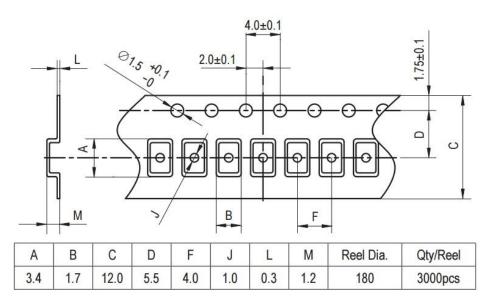
\*Contact ECS for availability

Rev.2019





### **POCKET TAPE DIMENSIONS (mm)**



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

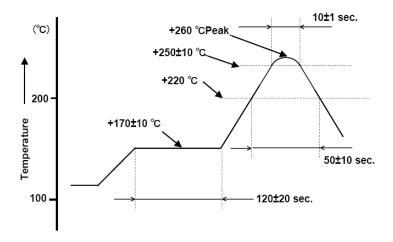


Figure 1) Suggested Reflow Profile

# **Mouser Electronics**

**Authorized Distributor** 

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## ECS:

<u>ECS-.327-12.5-34R-C-TR</u> <u>ECS-.327-9-34R-TR</u> <u>ECS-.327-7-34R-TR</u> <u>ECS-.327-12.5-34R-TR</u> <u>ECS-.327-12.5-34R-TR</u> <u>ECS-.327-12.5-34R-TR</u> <u>ECS-.327-12.5-34R-TR</u>