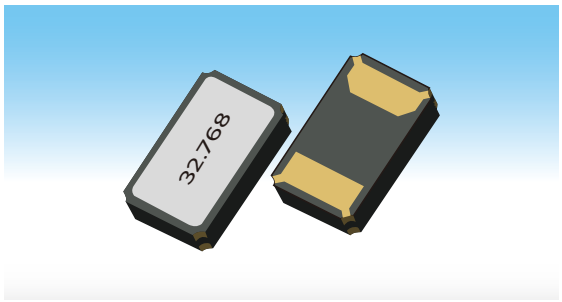
# SMD 32.768kHz Crystal Units

**7R Series SMD 32.768kHz Crystal Unit** | **32.768kHz** | **Size: 2.0×1.2×0.6mm**




Actual size

## Features

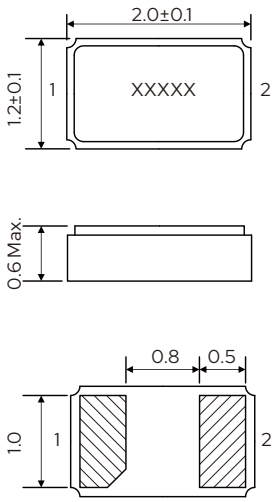
- 2012 size Ultra miniature and lightweight SMD tuning fork crystal units with low profile of 0.6mm
- A ceramic package with metal lid providing high precision and reliability
- Excellent heat resistance and environmental characteristics
- Application for mobile communications, Consumer device, IoT, Smart card, Wave clock, Wireless communications, etc.
- RoHS Compliant / Pb Free

## Standard Specifications

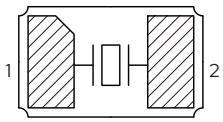
| Item \ Type | 7R Series SMD 32.768kHz Crystal Units |
|---|---|
| Frequency Range | 32.768 kHz |
| Load Capacitance | 7pF, 9pF, 12.5pF, or specify |
| Drive Level | 0.5μW max. |
| Frequency Tolerance | ±20ppm, or specify |
| Series Resistance | 90KΩ max. |
| Turnover Temperature | ±25°C±5°C |
| Parabolic Coefficient | $(-0.03\pm0.01)\times10^{-6}/°C^2$ max. |
| Operating Temperature Range | -20~+70°C, -40~+85°C, or specify |
| Storage Temperature Range | -55~+125°C |
| Shunt Capacitance | 1.3pF Typ. |
| Size (L×W×H) (mm) | 2.0×1.2×0.60 |
| Packing Unit | 3000pcs./reel |

## Dimensions

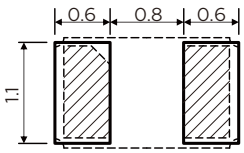
[mm]




### Connection




### Suggested Layout




Top View Suggested Layout