

SMD Tuning Fork Crystal Unit

3.2 x 1.5 mm / 32.768 kHz

TFX-02S

FEATURES

- 32.768 kHz tuning fork crystal unit
- Frequency tolerance of ± 10 ppm ~ (@25°C) available
- Wide operating temperature range of -40 ~ +105°C available
- Robust ceramic package with metal lid sealed by seam welding
- Specifications in conformity with AEC-Q200 available on request



APPLICATIONS

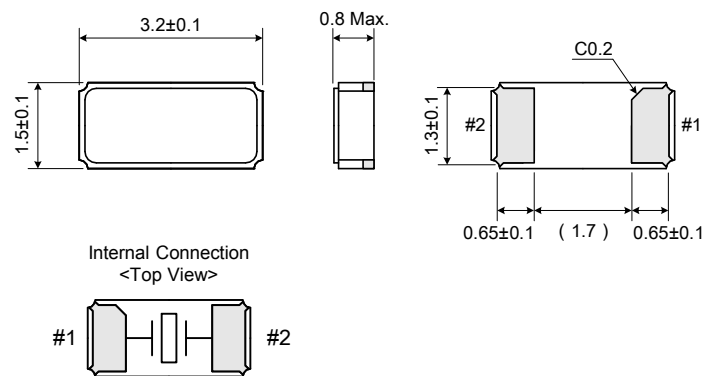
- Car audio systems / car GPS units / remote keyless entry / dash cameras
- Smartphones / wireless-modules

STANDARD SPECIFICATIONS

| Item | Specifications | Conditions / Remarks |
|---------------------------------------|--------------------------------------|-------------------------------------|
| Nominal frequency | 32.768 kHz | - |
| Frequency tolerance | ± 10 ppm ~ | @25°C See below for more options |
| Equivalent series resistance (E.S.R.) | 70 kΩ Max. | - |
| Motional capacitance | 6.5 fF Typ. | - |
| Shunt capacitance | 1.5 pF Typ. | - |
| Storage temperature | -55 ~ +125°C | - |
| Operating temperature | -40 ~ +85°C -40 ~ +105°C | See below for more options |
| Temperature coefficient | -0.03 \pm 0.01 ppm/°C ² | - |
| Turnover temperature | 25 \pm 5°C | - |
| Load capacitance | 7.0, 9.0, 12.5 pF | Other values available |
| Drive level | 0.5 μ W Max. | - |
| Tape and reel | 3000 pcs/reel | Reel diameter: ϕ 180 mm |

OUTLINE DIMENSIONS

(Unit: mm)

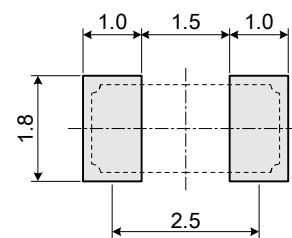


GENERAL NOTES

- Certain combinations of standard options may be classified as high-spec models.
- Please consult us for specifications that do not match the standard specifications.
- The information in this document is subject to change without notice.

RECOMMENDED LAND PATTERN

(Unit: mm)



ORDERING NUMBER GUIDE

