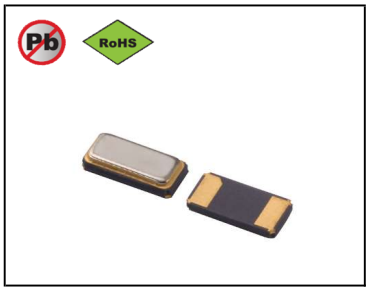
KS315 32.768kHz Crystal



■ TUNING FORK SMD TYPE 3.2x1.5mm

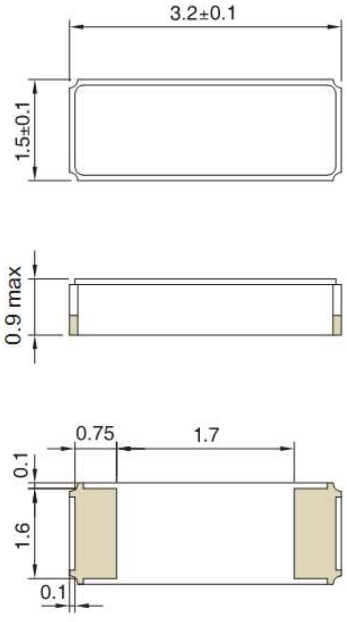
- Miniature Ceramic Surface Mount package
- 32.768kHz Frequency Reference
- Frequency Tolerance ±20ppm (STD), ±10ppm available

● Applications : Industrial applications, Mobile Communications, Wireless applications

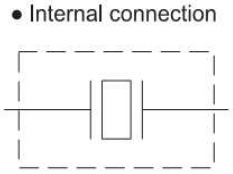
■ Standard Specification

Nominal Frequency	32.768KHz
Motional resistance (ESR)	70kΩ Max
Load capacitance (CL)	6pF, 7pF, 9pF, 12.5pF or please specify
Frequency tolerance (25℃)	±20ppm Max (std) or please specify
TurnoverTemperature	25℃±5℃
Temperature coefficient	-0.035ppm/℃² Typ
Operating temperature range	-40℃ to +85℃
Storage temperature range	-55℃ to +125℃
Level of drive(DL)	0.1㎼ Typ, 1.0㎼ Max
Shunt Capacitance (C0)	1.0pF Typ
Aging (Initial first year)	±3ppm Max
Insulation Resistance (DC 100V)	500MΩ Min

■ Dimensions (mm)







■ Part Numbering Guide

KS315 12 20 F 32K768000 TR

▶Package Type
KS315 : 3.2x1.5mm

▶Load Capacitance (pF)
(12) : 12.5pF
(9) : 9pF
(7) : 7pF
(6) : 6pF
(5) : 5pF
(4) : 4pF

▶Packing Type
(TR) : Tape&Reel [3,000pcs], (Blank) : Bulk

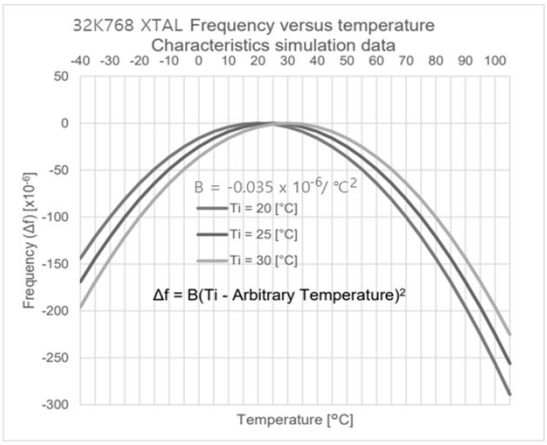
▶Center Frequency : 32.768KHZ

▶Operating Temperature Range(℃)
(F) : -40 ~ 85℃

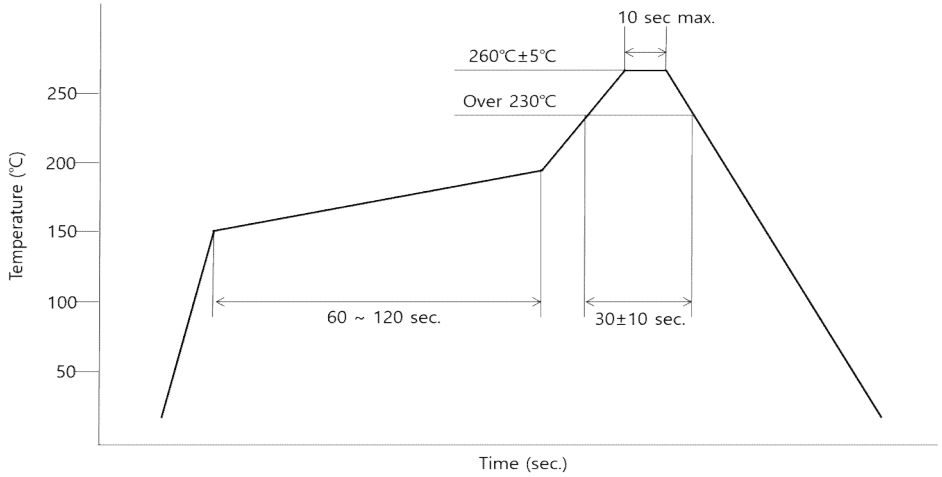
▶Frequency tolerance @25℃
(20) : ±20ppm
(10) : ±10ppm

*Please contact us for other specifications.

■ Frequency vs. Temperature Characteristics



■ Recommendation reflow condition



(1) Reflow soldering heat resistance
Peak Temp. : 265℃, 10sec.
Heating : 230℃ or higher, 40sec.
Preheating : 150~180℃, 120sec.
Reflow passage times : 2 times

(2) Manual soldering heat resistance
Pressing a soldering iron of 350℃ on the terminal electrode
Soldering touch time : 4sec.
Manual soldering times : 2 times