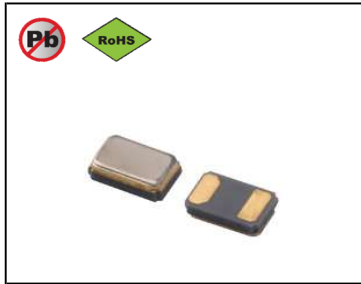


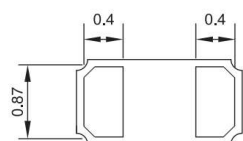
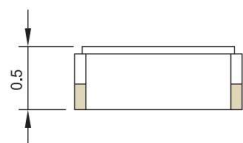
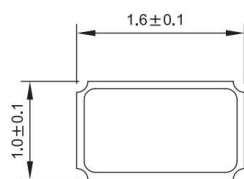
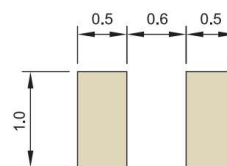
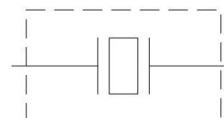
KS161**32.768kHz Crystal****■ TUNING FORK SMD TYPE 1.6x1.0mm**

- Miniature Ceramic Surface Mount package
- 32.768kHz Frequency Reference
- Frequency Tolerance $\pm 20\text{ppm}$ (STD), $\pm 10\text{ppm}$ available

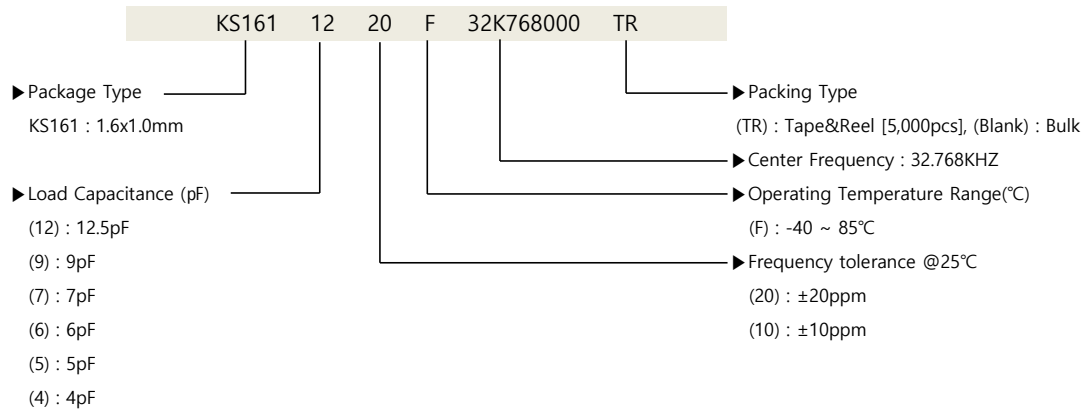
- Applications : Industrial applications, Mobile Communications, Wireless applications

■ Standard Specification

Nominal Frequency	32.768KHz
Motional resistance (ESR)	90k Ω Max
Load capacitance (CL)	6pF, 7pF, 9pF, 12.5pF or please specify
Frequency tolerance (25°C)	$\pm 20\text{ppm}$ Max (std) or please specify
Turnover Temperature	25°C $\pm$ 5°C
Temperature coefficient	-0.035ppm/°C ² Typ
Operating temperature range	-40°C to +85°C
Storage temperature range	-55°C to +125°C
Level of drive(DL)	0.1 μW Typ, 0.5 μW Max
Shunt Capacitance (C0)	1.2pF Typ
Aging (Initial first year)	$\pm 3\text{ppm}$ Max
Insulation Resistance (DC 100V)	500M Ω Min

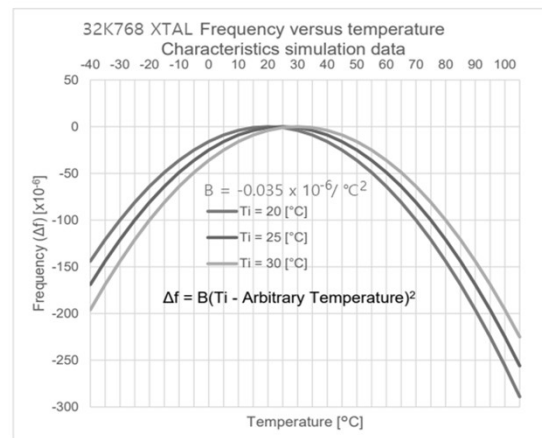
■ Dimensions (mm)**• Recommended Soldering Pattern****• Internal connection**

Part Numbering Guide

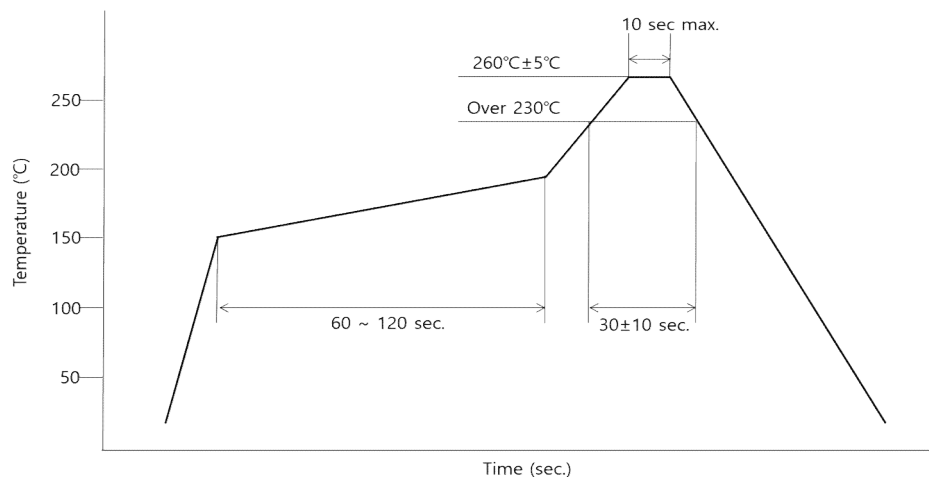


*Please contact us for other specifications.

Frequency vs. Temperature Characteristics



Recommendation reflow condition



(1) Reflow soldering heat resistance

Peak Temp. : 265°C, 10sec.

Heating : 230°C or higher, 40sec.

Preheating : 150~180°C, 120sec.

Reflow passage times : 2 times

(2) Manual soldering heat resistance

Pressing a soldering iron of 350°C on the terminal electrode

Soldering touch time : 4sec.

Manual soldering times : 2 times