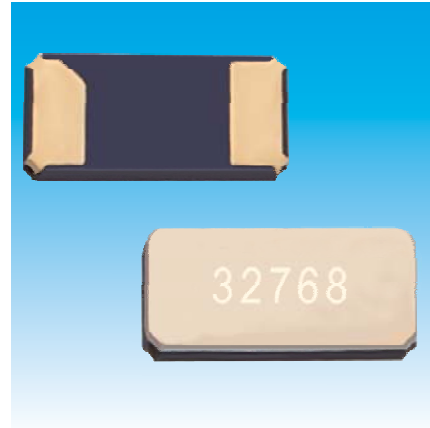


### Features

- 3215 size ultra miniature and lightweight with a low profile of 0.75mm
- High precision and reliability
- High reliable environmental performance
- Automatic mounting and reflow soldering
- Applications: *Smartphone, Wave Clock, Mobile Communications, Automotive, etc.*
- RoHS Compliant & Pb Free



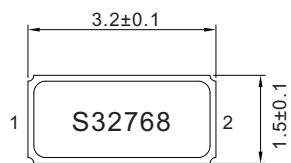
### Standard Specifications

Item / Type	7L Series 32.768kHz SMD Crystal Units
Frequency Range	32.768 kHz
Frequency Tolerance	±20ppm, or specify
Load Capacitance	6pF, 9pF, 12.5pF, or specify
Operating Temperature Range	-40~+85°C, or specify
Storage Temperature Range	-55~+125°C
Drive Level	1.0μW Max.
Turnover Temperature	±25°C±5°C
Parabolic Coefficient	$(-0.03±0.01)×10^{-6}/°C^2$
Shunt Capacitance	1.0pF Typ.
Aging (at 25°C)	±3ppm at first year
Packing Unit	3000pcs./Reel

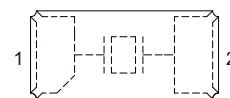
### Equivalent Series Resistance

Fundamental	
32.768 kHz	70kΩ Max.

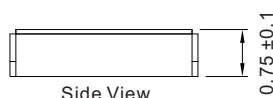
### Dimensions [mm]



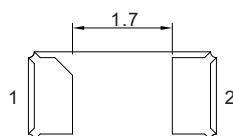
Top View



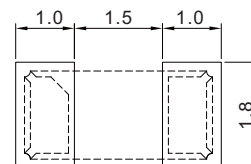
Top View Crystal Connection



Side View



Bottom View



Top View Suggested Layout