

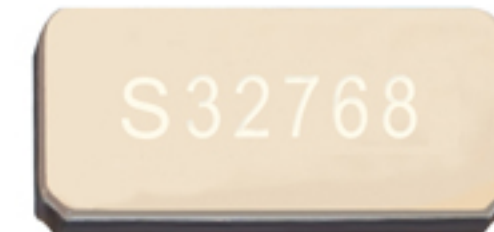
# SMD Tuning Fork Crystal



**Size: 3.2×1.5×0.75 mm      7L Series SMD Tuning Fork Crystal**

## Features

- 2 pads surface mount package.
- 3215 size miniature and lightweight SMD tuning fork crystal resonator with a low profile of 0.75mm.
- High reliable environmental performance.
- Automatic mounting and reflow soldering.
- Application for variety of automotive, Mobile communications, PDA, Wave clock, Wireless communications, digital appliance, etc.
- RoHS Compliant / Pb-Free.



## Electrical Specifications

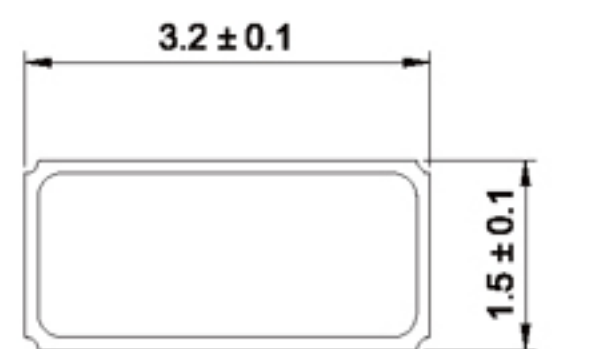
Item /Type	7L (7L Series SMD tuning fork crystal)
Frequency Range	32.768 kHz
Load capacitance	12.5pF, other spec.
Drive level	1.0μW Max.
Frequency tolerance	±20ppm, or specify
Turnover Temperature	±25°C±5°C
Parabolic Coefficient	$(-0.03±0.01) \times 10^{-6}/^{\circ}\text{C}^2$
Operating temperature range	-20~+70°C, ±40~+85°C
Storage temperature range	±55~+125°C
Aging (at 25°C)	±3ppm at first year
Shunting capacitance	1.0pF Typ.
Packing Unit	3000pcs./Reel

## Equivalent Series Resistance(ESR)

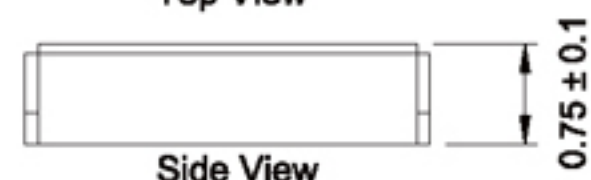
Fundamental	
32.768kHz	70 KΩ Max.

## Dimensions

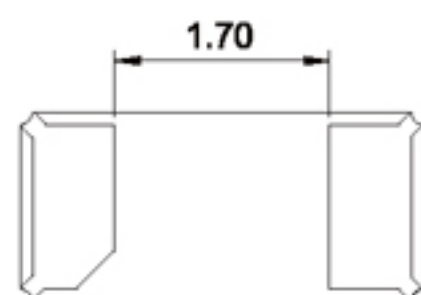
Units:mm



Top View



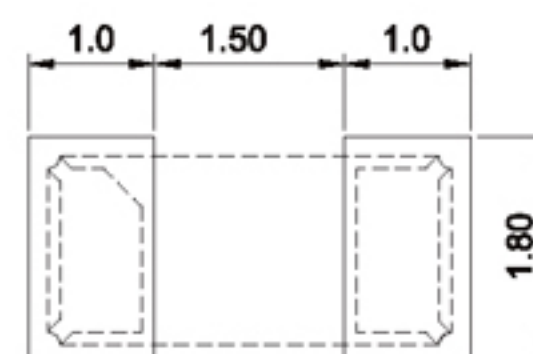
Side View



Bottom View



Top View Crystal Connection



Top View Suggested Layout