## **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





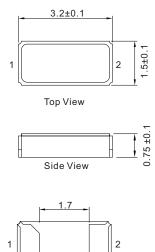
## Standard Specifications

Туре	7L Series SMD Crystal
Frequency Range	32.768 kHz
Frequency Tolerance	±20ppm
Load Capacitance	6pF, 7pF, 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 <sup>-6</sup> /°C <sup>2</sup>
Shunt Capacitance	1.0pF Typ.
Aging (at 25°C)	±3ppm at first year
Packing Unit	3000pcs./Reel

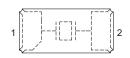
## **Equivalent Series Resistance**

Funda	amental	
32.768 kHz	70kΩ Max.	

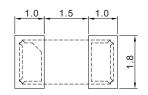
## Dimensions [mm]



**Bottom View** 



Top View Crystal Connection



Top View Suggested Layout