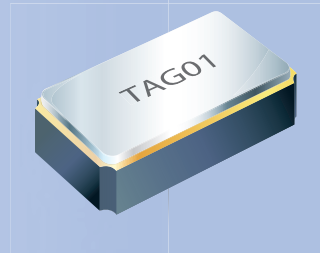


# SMD kHz Crystals

## 1.6 x 1.0 x 0.5 (max) mm 9H T12 Series

### Features

- 2 pads surface mount package.
- Application for NB, Smart Phone, variety of compact portable consumer products reference clocks.
- High reliable environmental performance.
- RoHS compliant /Pb Free.



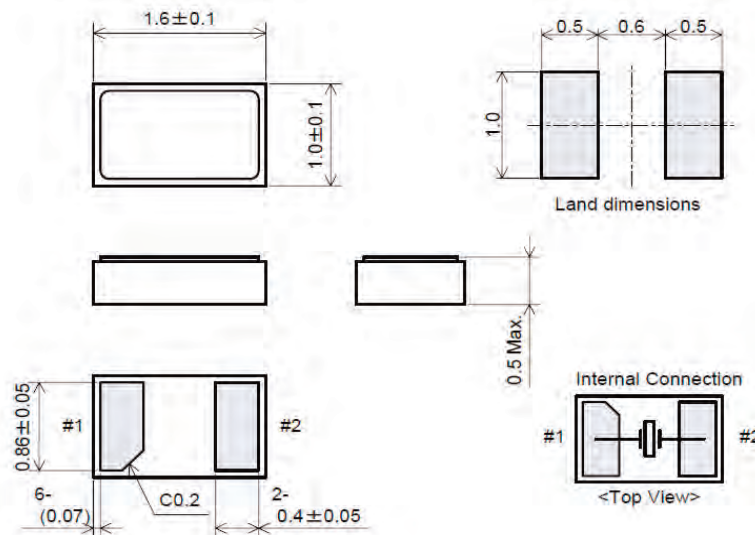
### Electrical Specifications

Item / Type	9H T12
Norminal Frequency	32.768 kHz
Frequency Tolerance(at 25 °C)	± 20 ppm , or specify
Operation Temperature Range	- 40 ~ + 85 °C
Shunt Capacitance (C0)	1.3 pF typical
Motional Capacitance (C1)	6.4 fF typical
Insulation Resistance (IR)	500 MΩ Min.
Drive Level (DL)	0.5 μW Max.
Load Capacitance( CL)	12.5 pF , other spec.
Turnover Temperature (Ti)	25 °C ± 5 °C
Parabolic Coefficient (B)	$(- 0.03 \pm 0.01) * 10^{-6} / ^\circ\text{C}^2$
Aging (at 25 °C)	± 3 ppm at first year
Storage Temperature Range	- 55 ~ +125 °C

### Equivalent Series Resistance(ESR)

T12  
90 KΩ Max

### Dimensions



Units: mm