

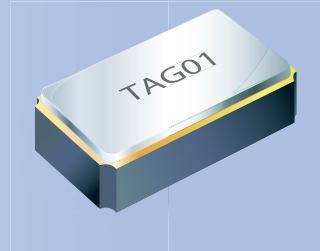
# SMD kHz Crystals

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

Quartz Crystals  
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.



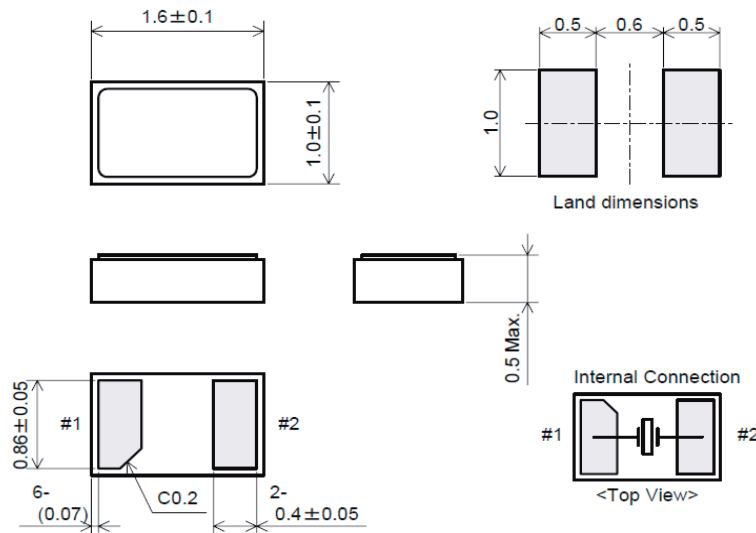
### Electrical Specifications

| 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

Remark : Specification subject to change without prior notice. Please confirm with our sales. <http://www.txccorp.com>