



**We are committed to the supply of all types of substrate wafers to the microelectronics industry**

## Tuning Fork

### Why 32,768 Hz?

$$32,768 = 2^{15}$$

- In an analog watch, a stepping motor receives one impulse per second which advances the second hand by 6°, i.e., 1/60th of a circle, every second.
- Dividing 32,768 Hz by two 15 times results in 1 Hz
- The 32,768 Hz is a compromise among size, power requirement (i.e., battery life) and stability.

32,768

16,384

8,192

4,096

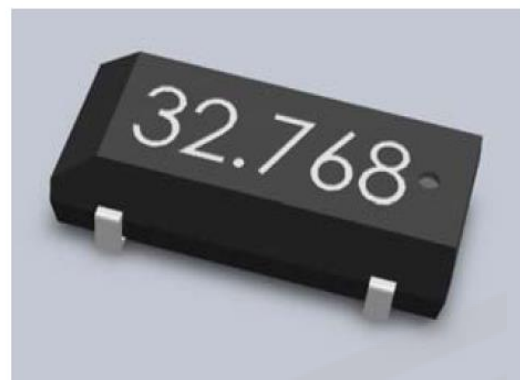
2,048

1,024.

512

256

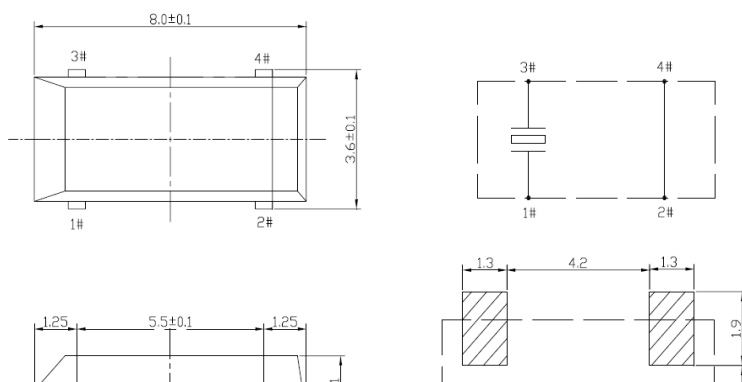
..., etc



### Standard Specifications

Nominal Frequency 标称频率	32.768 KHz
Frequency Tolerance 频率公差	±20 ppm (at 25°C±3°C)
Load Capacitance 负载电容	12.5 pf
Equivalent Series Resistance 等效串联电阻	50 KOhms (Max.)
Drive Level 激励电平	1μW (Max.)
Shunt Capacitance 静电容	1.25 pf (Typ)
Operating Temperature Range 工作温度范围	-40°C~+85°C
Storage Temperature Range 储存温度范围	-55°C~+125°C
Turnover Temperature 拐点温度	25°C±5°C
Temperature Coefficient 温度系数	-0.034±0.006ppm/°C <sup>2</sup>
Aging (First Year) 老化	±5ppm(at 25°C)

### Package Dimension



### HANGZHOU FREQCONTROL ELECTRONIC TECHNOLOGY LTD.

Head office : # 1106, Crystal International Business Center(CIBC), No.198 Wuxing Rd ,Qianjiang new city Hangzhou, P.R.China Post code: 310006  
 TEL: 0086-571-85803723 85803731 85803732 FAX: 0086-571-85803724  
 E-mail: sales@csimc-freqcontrol.com [thwu@mail.hz.zj.cn](mailto:thwu@mail.hz.zj.cn)

