

## DIP QUARTZ CRYSTAL RESONATOR

## 石英晶体谐振器



## DIP Tuning Fork 3×8 mm

- Tuning fork crystal in 3 x 8 mm cylinder type
- 32.768 KHz standard
- ±20 ppm Standard
- Excellent Reliability Performance

RoHS  
2002/95/

RoHS compliant

## ★ PARAMETERS

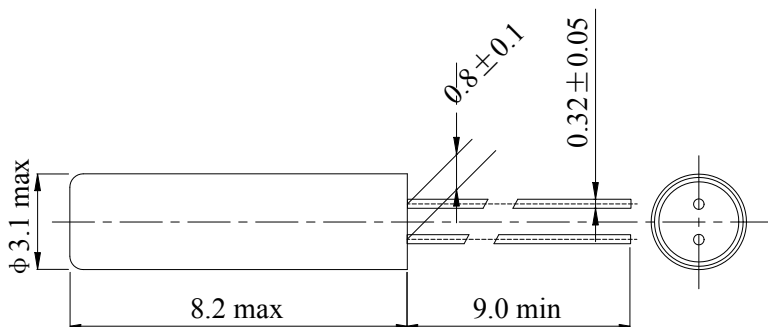
## 技术参数

| PARAMETERS              | 参数     | SPECIFICATION 规格                                                                               |
|-------------------------|--------|------------------------------------------------------------------------------------------------|
| Frequency Range         | 频率范围   | 32.768KHz (30.00~ 200.00 KHz available)                                                        |
| Loading Capacitance     | 负载电容   | 12.5pF Std. 6 pF~20pF available                                                                |
| Drive Level             | 激励电平   | 1.0 μ W Max                                                                                    |
| Frequency Tolerance     | 频率偏差   | ±5ppm / ±10ppm / ±20ppm ( at 25℃ )                                                             |
| Equivalent Resistance   | 谐振电阻   | 30K Ω Max                                                                                      |
| Temperature coefficient | 温度曲线系数 | -0.04×10 <sup>-6</sup> /℃ <sup>2</sup> max,<br>-0.034×10 <sup>-6</sup> /℃ <sup>2</sup> typical |
| Operating Temp. Range:  | 工作温度范围 | -20~+70℃ / -40~+85℃                                                                            |
| Storage Temp. Range:    | 储存温度范围 | -40~+85℃                                                                                       |
| Aging (25℃, First Year) | 老化率    | ±5ppm max                                                                                      |

◎ All specification subject change without notice. 规格变化，恕不另行通知。

## ★ DIMENSIONS&amp; LAND PATTERN LAYOUT (Unit: mm) 外形尺寸

## ★ Frequency Stability vs. Temperature 温频特性



| Operating Temperature Range | Frequency Stability |         |  |
|-----------------------------|---------------------|---------|--|
|                             | -80ppm              | -160ppm |  |
| -10℃~+60℃                   | ●                   |         |  |
| -20℃~+70℃                   |                     | ●       |  |

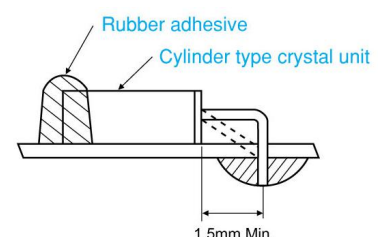
● standard ○ available

## ● Mounting of cylinder type products:

Soldering the body of the cylinder type crystal units with PCB must be avoided due to deteriorate the characteristics or damage the products. Rubber adhesive is recommended.

## ● Soldering

Lead wires should be soldered within 3 seconds with the soldering iron heated to a temperature no higher than 300℃



**★ PART NUMBER GUIDE 部件号示例** *e.g. JXX32.768K12.5D8-20 (\*D8=3.0×8.0mm)*

|    | Quartz Crystal Resonator<br>石英晶体谐振器 | Frequency<br>频率 | Load Capacitance<br>负载电容 | Package<br>盒型 | Frequency Tolerance<br>常温频差 ppm |
|----|-------------------------------------|-----------------|--------------------------|---------------|---------------------------------|
| JX | X                                   | 32.768KHz       | 12.5                     | D8            | 20                              |

**★ WAVE SOLDERING PROFILE 波峰焊特性**