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# **SPECIFICATION**

**PN: SJK-6K677500KDY220ZA6**

**深圳市晶科鑫实业有限公司**

**SHENZHEN CRYSTAL TECHNOLOGY INDUSTRIAL CO., LTD.**

# Crystal Resonators

## JU206/308 KHZ 6K6 Series



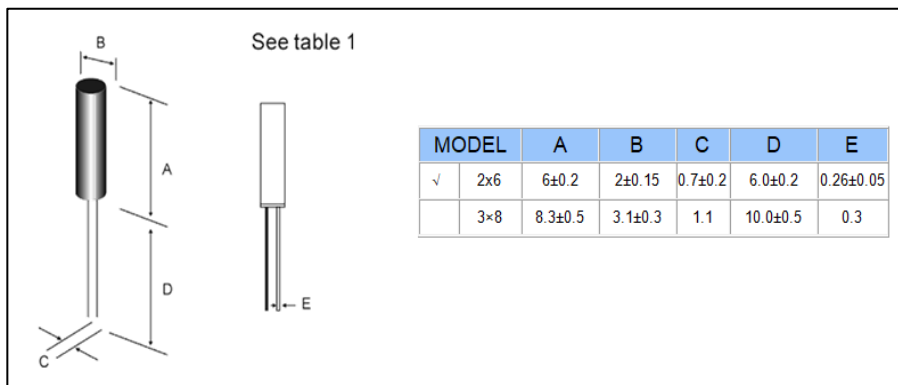
### FEATURE

- Best suited for portable devices with low current consumption.
- For a clock source in digital equipments.
- RoHS Compliant / Pb Free.

### ELECTRICAL SPECIFICATIONS (电气参数)

Frequency range	77.500KHz
Package	2x6mm
Frequency Tolerance (at 25°C)	±20ppm
ESR	50KΩ Max
Turnover Temperature	25 ± 5°C
Frequency Temperature Curve	[-0.035±0.01]ppm/°C <sup>2</sup>
Operable Temperature Range	-20°C to +70 °C
Storage Temperature Range	-40 °C to +85 °C
Shunt Capacitance (C0)	1.75pF Typ
Dynamic Capacitance (C1)	0.0035fF Typ
Driver Level (Typical)	1 μW Max
Capacitance Ratio C0/C1	500 Typical
Quality Factor Q	60000Typical
Load Capacitance(CL)	12.5PF
Insulation Resistance	500Mohm Min DC=100V±15V(Pin to Pin,Pin to case)
Aging @25°C 5st year (Max)	±3ppm/year

### Dimension (尺寸) (Unit: mm)



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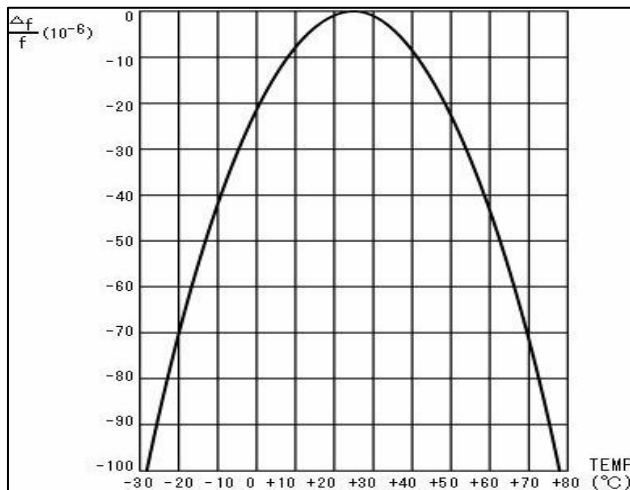
## JU206/308 KHZ 6K6 Series



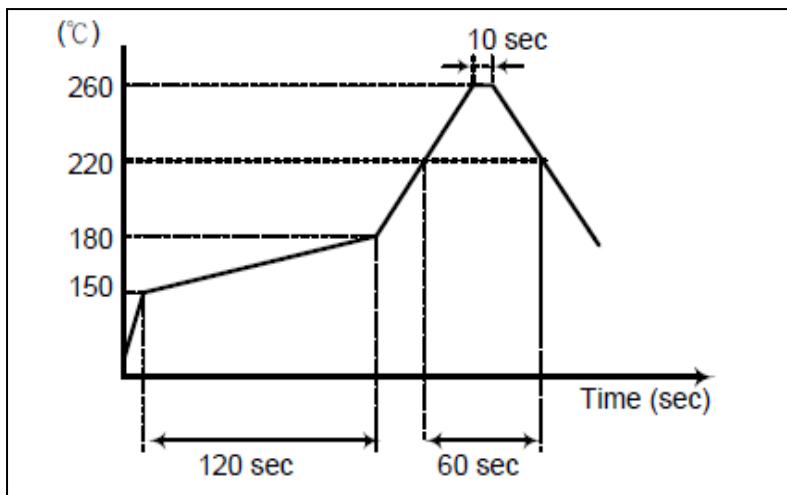
MARK (印字)

77.500

### Frequency VS Temperature Curve



### REFLOW CONDITION (回流焊)



The reflow temperature profile may vary depending on the product model, specifications and frequency range. Refer to the individual product specifications for details

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### Processing Instructions(使用说明)

#### PROCESSING INSTRUCTIONS

##### 1 石英晶体意外跌落When dropped by mistake

设计和制造的石英晶体本身具有耐冲击能力,但是当石英晶体元件经受剧烈的机械冲击,如跌落到地板上或安装期间剧烈震动时,在使用之前需要进行电性能确认。

The crystal units are designed and manufactured to resist physical shocks.However,when the crystal units are subjected to excessive impact such as being dropped onto the floor or giving shocks during processing,need to make sure its satisfactory performance before using it.

##### 2 焊接Soldering

###### (1)引线型产品Lead Type products

a.使用电烙铁焊接时,引线应该在3秒内焊接完毕,电烙铁温度不能高于300℃

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

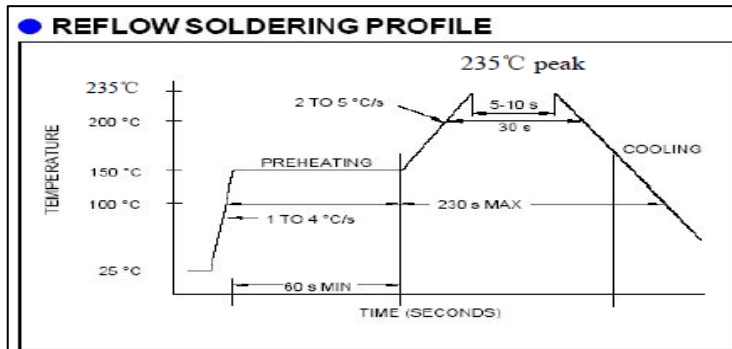
higher than 300℃ b.使用浸锡方式焊接时,引线应该在10秒内焊接完毕,焊锡温度不能高于260℃,并且注意不能将整个晶体浸锡.推荐使用垂直安装方式,避免热力直接传导到晶体上。

In solder-dip processing,the leads should be soldered within 10 seconds with a temperature no higher than 260℃.Mounting in upright is recommendable to prevent the heat conduction directly to the body of the crystal unit.

###### (2)SMD产品SMD Type products

a.TMXLF-206产品系列推荐使用下面的回流焊曲线

The REFLOW SOLDERING PROFILE as below is recommended forTMXLF-206 families.



##### 3 石英晶体弯角TO BEND THE LEAD of cylinder type products

(1)当圆柱状晶体元件需要弯角时,为了防止弯角时造成密封玻璃体的破裂,从弯角处到晶体基座底部距荐距离3.0mm,并使用工装夹具进行弯脚。

When the lead of cylinder type crystal units need to be bent,leave more than 1.5mm (3.0mm is case in order to prevent from any cracks of the hermetic sealing glass at the root of the lead,and use a jig

(2)当圆柱状晶体元件进行弯脚时,不要剥离引线的镀层

When bending the lead of cylinder type crystal units,do not scrape off the soldering plating from the lead surface.

### PROCESSING INSTRUCTIONS

#### 4 元件的安装MOUNTING

4.1圆柱状晶体元件的安装MOUNTING of cylinder type products (1)为了避免影响元件电性能或损坏元件, 严禁将圆柱状晶体元件外壳焊接在印制板上进行固定。推荐使用橡胶粘结剂进行固定.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

(2)当用手工来弯曲引线时, 请遵照下列方法When the lead needs to be bent by hand, please follow the instruction as below: 用手指捏住圆柱晶体的外壳;用镊子夹住引线要弯曲的部位, 该部位离晶体基座底部1.5mm以上(推荐3.0mm);用镊子夹住弯曲引线成90°, 不要用力拉引线。用力拉引线可能造成引线根部的玻璃子破裂, 而产生漏气损坏元件电性能。

Hold the body of the cylinder type crystal unit in fingers;

Pick at the part with tweezer, which you want to bend. There should be more than 1.5mm (3.0mm is recommended) from the body case; Bend the lead 90° by tweezer without pulling the lead strongly. If pulling the lead strongly may cause any cracks of hermetic sealing glass at the root of the lead and may cause the leakage and the characteristics to deteriorate.

5 石英晶体元件的清洗CLEANING (1)恶劣的超声波清洗或超声波焊接可能会影响和损坏石英晶体元件。如果您对晶体元件进行了超声波清洗, 请一定在使用前 确认晶体元件是否受到了影响和损坏 Crystal units may be affected and destroyed at worst by supersonic cleaning or supersonic welding. Please be sure to check if your cleaning and welding process affects any damage to crystal units before using. (2)有些清洗液也可能造成晶体元件的损坏, 请在使用清洗液前确认该清洗液是否适用。

Some kinds of cleaning fluid may cause any damage to crystal units. Please be sure to check suitability of the cleaning fluid in advance.

#### 6 贮存STORAGE

石英晶体元件长时间存放在高温或高湿环境中, 可能会影响频率的稳定性或可焊性。请将晶体元件存放在正常温度和湿度环境中, 避免阳光直射和露水凝结, 避免贮存6个月以上再使用, 拆封后尽快装配使用。

Storage of crystal units under higher temperature or high humidity for a long term may affect frequency stability or solderability. Please store the crystal units under the normal temperature and humidity without exposing to direct sunlight and dew condensation