

# 深圳市晶科鑫实业有限公司

## 样品承认书

客户代码:	
物料名称:	贴片晶振
规格型号:	圆柱 JU3*8 32.768KHZ 12.5PF ±20PPM -40~85℃
P N/ SJK:	6K832768F12UC
环保属性:	<input type="checkbox"/> RoHS <input checked="" type="checkbox"/> REACH <input checked="" type="checkbox"/> HF <input type="checkbox"/> PAHS <input type="checkbox"/> 其它
版 次:	A1 2015-4-8 初版
湿敏等级:	一级

承 认 签 章					
供 应 商 承 认			( ) 公 司 承 认		
制 定	审 核	核 准	工 程 师	审 核	批 准
贺丹斌		黄灏东			
SJK 支持	18682088994 (Mr.黄)		盖章签署		
FAE_EMAIL	<a href="mailto:sjk-fae@q-crystal.com">sjk-fae@q-crystal.com</a>		日 期		
日 期			批示: <input type="checkbox"/> 接受 <input type="checkbox"/> 有条件接受		
备注:					

# CRYSTAL RESONANCER



## SERIES 6K8 / 3X8MM TUNING FORK WATCH CRYSTAL

### 1. FEATURE

- Small size

### 2. APPLICATIONS

- Microprocessor Systems
- Consumer Electronics

### 3. ELECTRICAL SPECIFICATIONS

Frequency	32.768KHz
Frequency Tolerance (at 25°C)	±20ppm
Load Capacitance(C <sub>L</sub> )	12.5PF
ESR	30 KΩ Max
Turnover Temperature	25 ± 2°C
Frequency Temperature Curve	-0.04ppm/°C <sup>2</sup> MAX
Operating Temperature Range	-40 °C to +85°C
Storage Temperature Range	-40 °C to +85 °C
Shunt Capacitance (C <sub>0</sub> )	0.9pF Typ
Dynamic Capacitance (C <sub>1</sub> )	2.0fF Typ
Driver Level (Typical)	1 μW Max
Insulation Resistance	100MΩ MIN at DC100V±15V
Aging @25°C 1 <sup>st</sup> year (Max)	±3ppm/year max

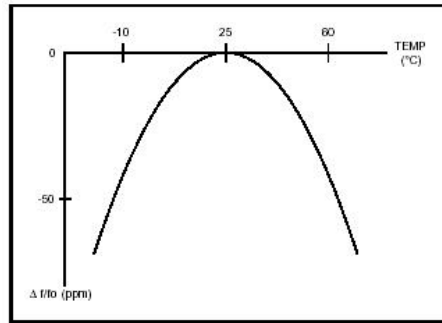
**REMARK:** SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE CONFIRM WITH OUR SALES ENGINEER.

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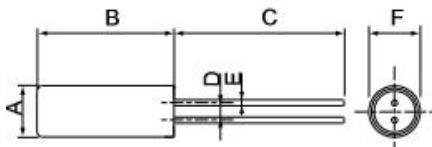


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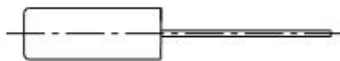
### 4. FREQUENCY VS TEMPERATURE CURVE



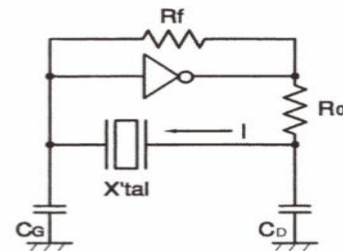
### 5. PACKING AND DIMENSIONS (Units: mm)



Type	A	B	C	D	E	F
6K6	Ø2.0	6.0±0.3	7.0±0.3	0.7±0.2	0.2±0.1	Ø2.0±0.1
6K8	Ø3.0	8.0±0.3	10.0±0.3	1.1±0.2	0.3±0.1	Ø3.0±0.1



### 6. OSCILLATION CIRCUIT



$$C_L = \frac{C_g \times C_d}{C_g + C_d} + C_s$$

### 7. Environment-proof · Mechanical property

No	Item	Specifications	Conditions	
1	High temperature storage	$\Delta f/f = \pm 5 \times 10^{-6}$	After storage under 85°C for 500 hrs, measure at room temperature.	1
2	Low temperature storage	$\Delta f/f = \pm 5 \times 10^{-6}$	After storage under -40°C for 500hrs, measure at room temperature	1
3	High temperature and high humidity storage	$\Delta f/f = \pm 5 \times 10^{-6}$	After storage under 60 °C ± 2 °C , 90 to 95% RH for 500 hrs, measure at	1

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			room temperature.	
4	Thermal shock resistance	$\Delta f/f = \pm 5 \times 10^{-6}$	Measured at room temperature after 20 cycles. $-25^{\circ}\text{C} \leftrightarrow +80^{\circ}\text{C}$ for 30 minutes.	1
5	Mechanical shock resistance	$\Delta f/f = \pm 5 \times 10^{-6}$	Measure after free drop of the RESONATOR three times from the height of 75cm onto a wooden board.	2
6	Vibration resistance	$\Delta f/f = \pm 5 \times 10^{-6}$	Amplitude 1.5mm and 10~60Hz with cycle time 2~3 minutes in 3 direction (X,Y, and Z axis) each for 2 hrs.	2
7	Resistance to soldering heat	$\Delta f/f = \pm 5 \times 10^{-6}$	Measured at room temperature after immersing the lead wire in a soldering bath of $300^{\circ}\text{C} \pm 10^{\circ}\text{C}$ for 5 seconds up to a position where it is 2mm away from the root of the plug.	1
8	Tensile strength of lead wire	$\Delta f/f = \pm 5 \times 10^{-6}$	Apply a load of 500g for 30 seconds in the lead wire's axial direction.	2
9	Bending strength of lead wire	$\Delta f/f = \pm 5 \times 10^{-6}$	Bending cycle : $0^{\circ} \rightarrow 45^{\circ} \rightarrow 0^{\circ} \rightarrow 45^{\circ} \rightarrow 0^{\circ}$	2
10	Solderability of lead wire	A minimum 95% of the area to be coated with solder	Apply resin-flux contained-solder to a soldering iron of $280^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5 seconds.	2

Note:

1. The above tests no. 1 to 9 must be conducted independently (not series tests)
2. \*1: Measure after 24 hours soak at room temperature .
3. \*2: Measure after 2 hours soak at room temperature .

## 8. Precautions

(1) Temperature for soldering the lead wire shall not exceed  $300^{\circ}\text{C}$  and the soldering time shall be within 5 seconds.

(2) Position to be soldered : Solder only the position where the lead wire is 1.0mm away from the glass seal.

Do not solder the case.

(3) Cutting, bending and correction of lead wire : The glass seal shall be free of any crack or other damage which may deteriorate the characteristics of RESONATORS.

备注:

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## SERIES 6K8 / 3X8MM TUNING FORK WATCH CRYSTAL

XTAL' 32, 768KHZ 系列							
SJK-	封装	中心频率(KHZ)	频率精度	负载电容 (PF)	等效阻抗 (KΩ)	工作温度	
例	7LC:3215 6LC:308C 7RC:2012 6K6:2*6 6K8:3*8	32768: 32.768KHZ	A: ±5PPM E: ±10PPM F: ±20PPM	12:12.5PF	U:常规值 S:指定值	A:-10~60 B:-20~70 C:-40~85	

单击下面可查看定价，库存，交付和生命周期等信息

[>>SJK\(晶科鑫\)](#)