



# 深圳市凯越翔电子有限公司

## 石英谐振器规格书

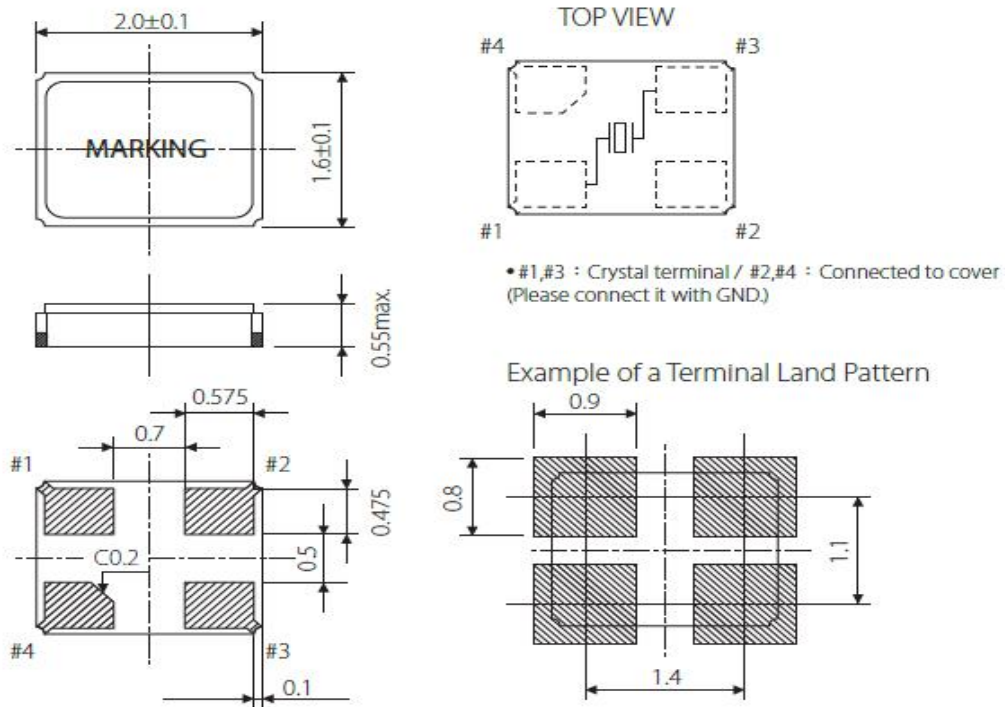
产品名称:	石英晶振谐振器
产品型号:	2016/40.000MHZ
产品参数:	6PF/±10PPM
原厂型号:	K2B400000610
尺寸图:	P. 2 3
凯越翔技术部:	董宗全

### 客户确认印栏

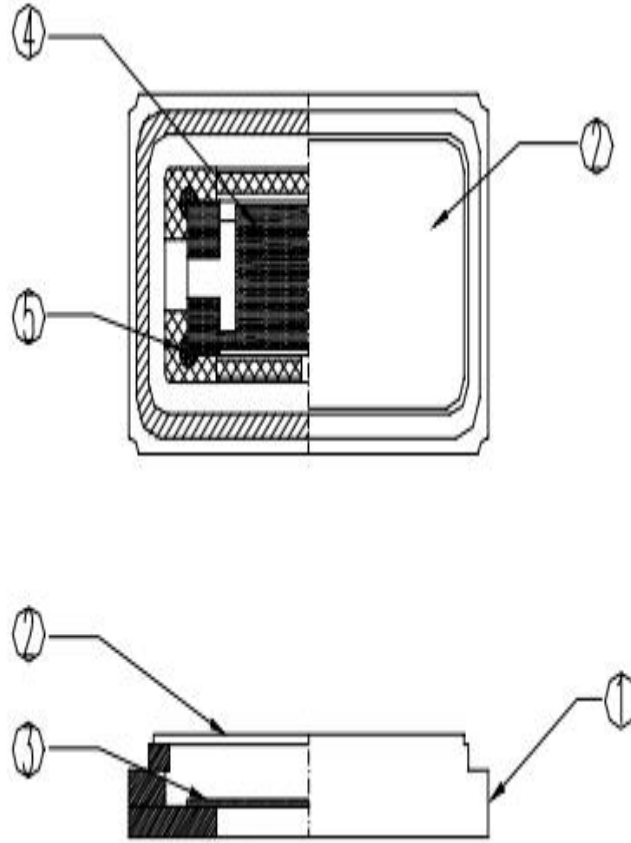
认证印章	负责人印章
年 月 日	年 月 日

本规格章程连同本页合共 5 页

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|--|---|
| 1. Frequency:                                  | 40.000 MHZ  |
| 2. Holder Type:                                | SMD2.0*1.6  |
| 3. Frequency Tolerance:                        | $\pm 10\text{ppm}$ at $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$  |
| 4. Equivalent Series Resistance:               | $60\ \Omega$ Max  |
| 5. Storage Temperature Range:                  | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$                    |
| 6. Operating Temperature Range:                | $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$                    |
| 7. Frequency Characteristics Over Temperatnre: | $\pm 10\text{ppm}$ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ |
| 8. Load Capacitance (CL):                      | 6PF   |
| 9. Drive Level:                                | $100\ \mu\text{W}$ Max  |
| 10. Shunt Capacitance:                         | 3PF MAX   |
| 11. Insulation Resistance:                     | $\geq 500\text{M}\ \Omega$ Min at 100 V                           |
| 12. Mode Of Oscillation:                       | Fundamental   |
| 13. Aging:                                     | 3ppm/Year   |
| Marking description:                           | KYX40.000   |
| 14. Dimensiors(mm):                            |   |



16. Structure Illustration



PART NAME		MATERIAL	PART NAME		MATERIAL
1.	BASE	CERAMIC	4.	ELECTRODE	Metal
2.	LID	Co	5.	ADHESMES	SILVER GLUE
3.	BLANK	QUARTZ			

## Reliability Testing 可靠性测试项目介绍

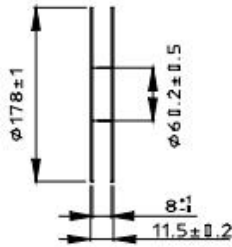
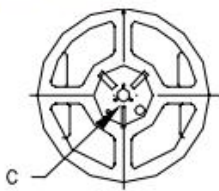
项目	验条件及要求	要求
Vibration 振动	Endurance condition by a frequency sweep shall be made. The entire frequency range from 10HZ to 50HZ and return to 10HZ, shall be transverse in 1min. Amplitude(total excursion):1.5mm this motion shall be applied for a period of 2h each of 3 mutually perpendicular axes(a total of 6h) 振动频率: 从 10HZ 到 55HZ, 再回到 10HZ 1 倍频程/min 幅度为 1.5mm 3 个相互垂直的方向各 2 小时	(1). FL: +/-5ppm (2). Rr: +/-5%
Drop 跌落	Form 70cm height 3 times on 3cm hard wooden floor 从 70cm 高处跌落到 3cm 厚的硬质木板上, 重复 3 次	
Shock 冲击	Peak acceleration:981m/s <sup>2</sup> duration of the pulse :6ms three successive shocks shall be applied in both direction of 3 mutually perpendicular axes(a total of 18 shocks) 加速度: 981m/s <sup>2</sup> 时间: 6ms 作用在 3 个相互垂直的方向	(1). FL: +/-5ppm (2). Rr: +/-8 Ω
Damp heat, constant 恒定湿热	The unit shall be stored at a temperature of 40℃ ±2℃ with relative humidity of 90%to95% for 48h, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 在温度: 40℃ ±2℃、湿度: 90%to95%条件下存放 48 小时, 然后在标准大气压下放置 1~2 小时后测试	
Cold 低温存储	The unit shall be stored at a temperature of -40℃ ±5℃ for 48h, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 在 -40℃ ±5℃ 下存放 48 小时, 然后在标准大气压下放置 1~2 小时后测试	
Dry heat 高温存储	The unit shall be stored at a temperature of 100℃ ±5℃ for 24h, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 100℃ ±5℃ 下存放 24 小时, 然后在标准大气压下放置 1~2 小时后测试	
Aging 老化	The unit shall be stored at a temperature of 85℃ ±5℃ for 7d then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made. 85℃ ±5℃ 下放置 7 天, 然后在标准大气压下放置 1~2 小时后测试	
Temperature cycling	The unit shall be subjected to 5 successive change of temperature cycles, each as show in table below, then it shall be subjected to standard atmospheric conditions for 1~2h after which measurement shall be made 在下表给定温度和时间参数的条件下循环 5 次, 标准大气压下放置 1~2 小时后测试	

温度循环		Temperature 温度	Duration 放置时间
	1	-40°C ± 3°C	30min (30 分钟)
	2	Standard atmospheric conditions 标准大气压	Within 30s 30 秒内
	3	100°C ± 3°C	30min (30 分钟)
	4	Standard atmospheric conditions 标准大气压	Within 30s 30 秒内

Resistance to soldering heat 耐焊接热	<p>250°C 217°C 200°C 150°C 25°C</p> <p>Peak 10s Max -6 °C /s Max cooling +4 °C /s Max preheating 60-to-120s 40-to-90s 25°C to peak: 360s TIME (Seconds) Total: 420s</p> <p>使用回流焊方法见上图</p>
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2. REEL : 3000 PCS



拟制	成望生	审核	董宗全	批准	赵庸桓
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