



深圳市凯越翔实业

石英谐振器规格书

| | |
|-----------|-----------------|
| 产 品 名 称: | 石英晶体谐振器 |
| 产 品 型 号: | 49US/13.1072MHZ |
| 产 品 参 数: | 20PF/±20PPM |
| 原 厂 型 号: | KUS1310722020 |
| 尺 寸 图: | P. 4 |
| 凯越翔实业技术部: | 董宗全 |

客户确认印栏

| | |
|--------|-------|
| 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

P:1

产品规格书

| | |
|--|--|
| | |
|--|--|

1.GENERAL

| | |
|----------------------|----------------|
| 1.1 HOLDER TYPE | 49US |
| 1.2 MODE | AT CUT |
| VIBRATION | : FUND |
| 1.3 OSCILLATION MODE | S&A KH-1240 |
| 1.4 TEST FACILITIES | -40°C TO +85°C |
| 1.5 STORAGE | 100 μ W |
| TEMPERATURE | : |
| 1.6 DRIVER LEVEL | 13.1072MHz |

2.ELECTRICAL PARAMETER

| | |
|-------------------------------------|----------------------------|
| | ±20ppm |
| 2.1 NORMAL FREQUENCY | ±20ppm |
| 2.2 FREQUENCY TOLERANCE (25°C ±2°C) | -20°C TO +70°C |
| 2.3 TEMPERATURE STABILITY | |
| 2.4 OPERATING TEMPERATURE RANGE | 20 PF |
| 2.5 LOAD CAPACITANCE | 7PF MAX |
| 2.6 MOTIONAL CAPACITANE | 40 Ω MAX |
| 2.7 SHUNT CAPACITANCE | 500M OHMS MIN AT DC 100V |
| 2.8 EFFECTIVE SERIES RESISTANCE | |
| 2.9 INSULATION RESISTANCE | 95%COVERAGE BY USING 90/10 |

3.MECHANICAL PARAMETER

| | |
|-------------------|--|
| 3.1 SOLDERABILITY | SOLD AT 245°C FOR 5 SEC. DIPING AFTER IMMERSION IN ALPHA 611 FLUX FOR 5 SEC. |
|-------------------|--|

I MECHANICAL ENDURANCE 机械特性

Provided that measurement shall be carried out after letting it alone in the room temperature for 1 hour.

试验产品应在室温下放置 1 小时后方可进行以下试验。

① SHOCK 抗击测试

Electrical characteristics shall be satisfied after dropping three time from the height of 50 cm onto Hard wooden board .

产品从 50 cm 高度自由落下到硬木板 3 次电气参数仍符合要求。

② VIBRATION 抗振测试

Electrical characteristics shall be satisfied after supplying following Vibration .

电气性能应满足以下的振动要求。

- | | | |
|------------------------|-------|---------------------------------|
| (1)VIBRATION FREQUENCY | 振动频率 | 10—55Hz |
| (2)REPEATED PERIOD | 周 期 | 1—2min |
| (3)FULL CYCLE | 全 振 幅 | 1.5mm P—P |
| (4)DIRECTION | 振动方向 | X.Y.Z |
| (5)TIME | 振动时间 | 2hours/each direction 2 小时/每个方向 |

③ STRENGTH OF TERMINALS/LEAD—WIRES 引脚与基座底部的强度测试

-1 PULLING 拉力测试

a)Body of specimen shall be fixed, and 900g of tension weight shall be supplied gradually to axial direction of terminals/lead-wires for 30 sec .

产品应固定在 900g 的拉力的情况下逐渐延基座底部/引线脚中轴方向拉 30 秒钟。

b)After above test a), there is no observation of any visual damages on the specimen.

经过 a)的测试，产品应没有任何可以目测到的损坏。

-2 BENDING 弯曲度测试

a)Body of specimen shall be fixed, and 90degree bending shall be given, being supplied 225gs tension weight .

After that, terminals/lead-wires shall be straightened gradually .

Then the same bending and straightening shall be supplied to the opposite direction in the same axial . (Refer to Fig-1)

产品固定后，以 90° 的弯曲并供以 225g 的拉力，然后沿同一轴线并与相反的方向 90 ° 的弯曲及伸直。（如图 1 所示）

b)After above test a), there is no observation of any visual damages on the specimen .

通过 a)测试后，晶体上应没有任何可以目测到的损坏。



FIG-1

④ SEALING TIGHTNESS 气密性测试

There is no observation of gas bubble after specimen put in hot water at +90°C—+95°C for 5 min .

晶体置于+90°C—+95°C的热水中 5 分钟，应没有气泡产生。

⑤ SOLDERING DIP 浸锡测试

Terminals/lead-wires of specimen shall be dipped into solder melted tank at +230°C—±5°C for 3sec . Dipping depth shall be 2mm from the bottom of specimens body . (After applying ROSIN flux) Soldering portion shall be covered in over 90% of terminals/lead-wires dipped .

将晶体引线脚置于+230°C—±5°C的锡桶中 3 分钟，基座底部离锡表面 2mm，（加上松香焊剂后）引线脚的沾锡率为 90% 以上。

⑥ SOLDER HEATING 沾锡耐热性测试

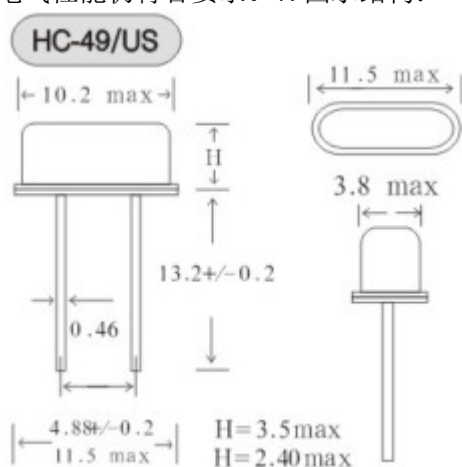
Terminals/lead-wires of specimen shall be dipped into solder melted tank at

+350°C—±10°C for $\frac{1}{3}$ ₋₀ sec .

Electrical characteristics shall be satisfied after dipping depth shall be 2mm from edge of terminals/lead-wires .

将已沾锡的产品的引线脚置于+350°C—±10°C的锡桶中 3-4 秒钟后 基座底部离锡表面 2mm，电气性能仍符合要求。

7. 图示结构：



II ENVIRONMENTAL ENDURANCE 环境特性

Provided that measurement shall be carried out after letting it alone in the room temperature for 1 hour .

必须将试验产品在室温下放置 1 小时后方可进行测试。

① HUMIDITY 耐湿测试

Electrical characteristics shall be satisfied after letting it alone at 60°C—±2°C in humidity of 90—95% for 250 hours .

试验产品在温度为 60°C—±2°C，相对湿度 90—95%的试验箱内放置 250 小时后电气性能仍符合要求。

② STORAGE IN LOW TEMPERATURE 低温储存测试

Electrical characteristics shall be satisfied after letting it alone at -30°C—±2°C for 250 hours .

试验产品在温度为-30°C—±2°C的试验箱中放置 250 小时后电气性能仍符合要求。

③ STORAGE IN HIGH TEMPERATURE 高温储存测试

Electrical characteristics shall be satisfied after letting it alone at +85°C—±2°C for 250 hours .

试验产品在温度为+85°C—±2°C的试验箱中放置 250 小时后电气性能仍符合要求。

④ TEMPERATURE CYCLE 温度变换测试

Electrical characteristics shall be satisfied after supplying the following temperature cycle (3cycles) .

Temperature shift from low to high, high to low shall be done in 1°C/min (Refer to Fig-2) .

电气性能应满足以下温度周期要求（3 个周期）

温度变换从低到高，从高到低变化量为 1°C/分。（如图 2 所示）



FIG — 2

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 拟 制 | 成望生 | 审 核 | 董宗全 | 批 准 | 赵庸桓 |
|-----|-----|-----|-----|-----|-----|

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Crystals category](#):

Click to view products by [Kaiyuexiang manufacturer](#):

Other Similar products are found below :

[CS325S24000000ABJT](#) [718-13.2-1](#) [MC405 32.0000K-R3:PURE SN](#) [FC-135R 32.7680KF-A3](#) [7A-40.000MAAE-T](#) [7B-27.000MBBK-T](#)
[FL2000085](#) [9B-15.360MBBK-B](#) [9C-7.680MBBK-T](#) [ASH7K-32.768KHZ](#) [AT-41.600MAGQ-T](#) [BTD1062E05A-513](#) [LFX TAL066198Cutt](#)
[9C-14.31818MBBK-T](#) [FA-238 50.0000MB30X-K3](#) [FC-12M 32.7680KA-AC3](#) [SSPT7F-9PF20-R](#) [FX325BS-38.88EEM1201](#)
[LFX TAL065253Cutt](#) [LFX TAL066431Cutt](#) [XT9S20ANA14M7456](#) [XT9SNLANA16M](#) [646G-24-2](#) [7A-24.576MBBK-T](#) [7B-30.000MBBK-T](#)
[WX26-32.768K-6PF](#) [9B-14.31818MBBK-B](#) [CD1AM](#) [7B-25.000MAAE-T](#) [7A-14.31818MBBK-T](#) [6504-202-1501](#) [6526-202-1501](#) [FA-118T](#)
[27.1200MB50P-K0](#) [FC-135R 32.7680KA-A3](#) [ABM12-104-37.400MHZT](#) [ABLS-10.000MHZ-D3W-T](#) [BTJ112E01E-513](#) [BTJ722K01C-7067](#)
[BTL-20-513](#) [TSX-3225 24.0000MF15X-AC](#) [TSX-3225 16.0000MF18X-AC](#) [BTJ120E02C](#) [BTL-12-513](#) [7A-10.000MBBK-T](#) [7A-](#)
[11.0592MBBK-T](#) [ABM12-103-24.000MHZT](#) [CS325S25000000ABJT](#) [ABM3B-25.000MHZ-B2-X-T](#) [FC-135 32.7680KA-A5](#) [FX0800015](#)