

(RoHS)

产 品 规 格 书

SPECIFICATION FOR APPROVAL

客户名称:
Customer Name: _____

产品名称:
Product Name: 石英晶体谐振器

产品型号:
Product Type: HC-49SMD

标称频率:
Nominal Freq: 3.2000000MHz~100.000000MHz

产品编号:
Part Coding _____

规格书编号:
Specification P/N: _____

客户料号:
Customer P/N: _____

日期:
Date: 2023-10-17

客户承认
Approved By Customer:

签章
Signature: _____

日期
Date: _____



深圳市新天源电子有限公司

SHENZHEN XINTIANYUAN ELECTRONICS CO.,LTD.

地 址: 深圳市宝安区石岩镇塘头宏发工业园1栋5楼

Add: 5/f.,Block 1,Hongfa Lndustrial Estate,Tangtou village,Shiyan Town,Baoan district,Shenzhen,Guangdong,China.

电话Tel: 0755-27650903 传真Fax: 0755-29833253

联系人: 王后勤 (小姐) 手机: 13728612903

E-mail: xyt@chinaxyt.cn 网 址: [//www.chinaxyt.cn](http://www.chinaxyt.cn)

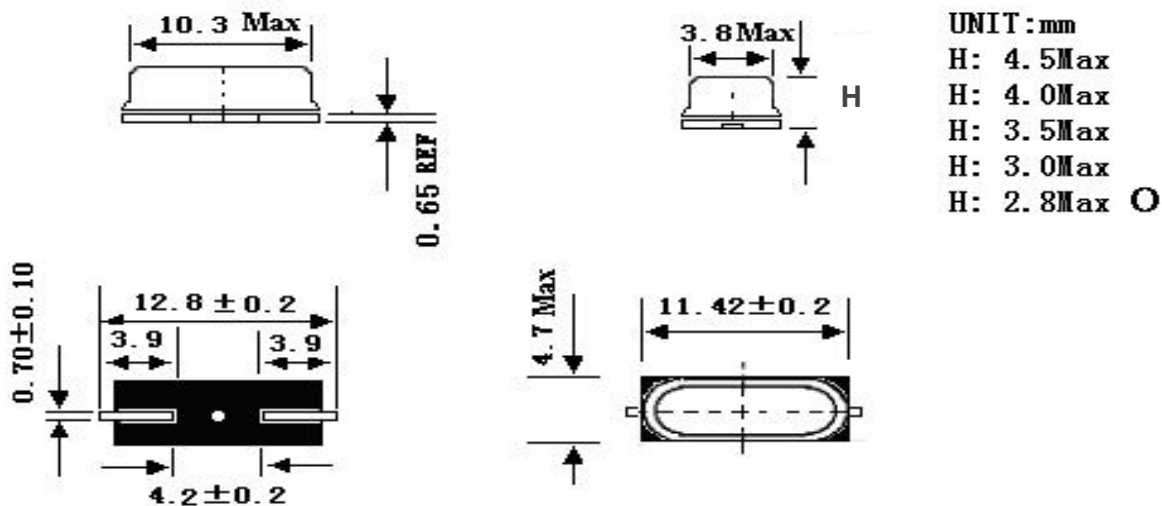
批准 Accepted 杜知清 审核 Checked 熊伟 编制 Issued 陈梅东

<p>深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.</p>	<p>石英晶体谐振器规格书 Specification of Quartz Crystal</p>	<p>NO:</p>
<p>HC-49SMD</p>		<p>Date: 2023/10/17</p>
<p>一、石英晶体规格参数 Quartz Crystal Specification Parameters</p>		
<p>1、产品型号 Holder Type</p>	<p>HC-49SMD</p>	
<p>2、标称频率 Nominal Frequency</p>	<p>3. 2000000MHz~100. 000000MHz</p>	
<p>3、振动模式： Mode of Oscillation</p>	<p>Fundamental</p>	
<p>4、调整频差 Frequency Tolerance at 25°C±2°C</p>	<p>±10ppm at 25°C±2°C</p>	
<p>5、等效电阻 Equivalent Resistance(ESR)</p>	<p>≤30Ω~120Ω</p>	
<p>6、负载电容 Load Capacitance(CL)</p>	<p>4pF~32pF</p>	
<p>7、温度频差 Temperature Characteristics</p>	<p>±20ppm/±30ppm</p>	
<p>8、工作温度范围 Operating Temperature range</p>	<p>-20~+70°C / -40~+85°C</p>	
<p>9、储存温度范围 Storage Temperature range</p>	<p>-40~+85°C</p>	
<p>10、激励功率 Drive Level</p>	<p>100uW</p>	
<p>11、静态电容 Shunt Capacitance (C0)</p>	<p><4. 0pF</p>	
<p>12、绝缘电阻 Insulation Resistance</p>	<p>≥500MΩ (DC100V±15V)</p>	
<p>13、测试仪器 Measure Instrument</p>	<p>KH1240</p>	
<p>14、年老化率 Aging Rate a Year</p>	<p>≤±3ppm/年</p>	

深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	HC-49SMD	Date: 2023/10/17

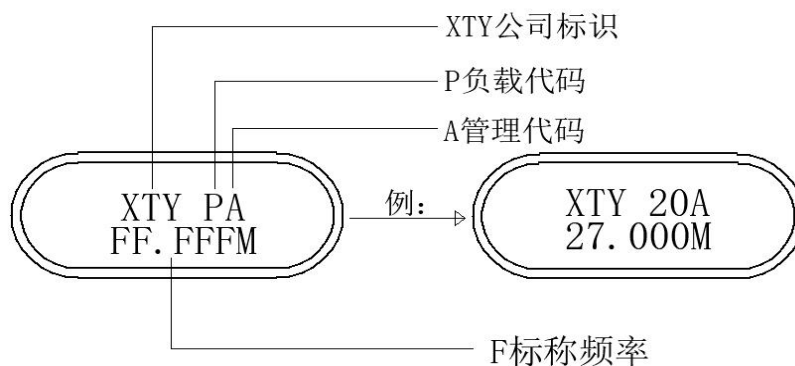
二、石英晶体尺寸、结构

Quartz Crystal Dimensions And Structure



三、石英晶体印字

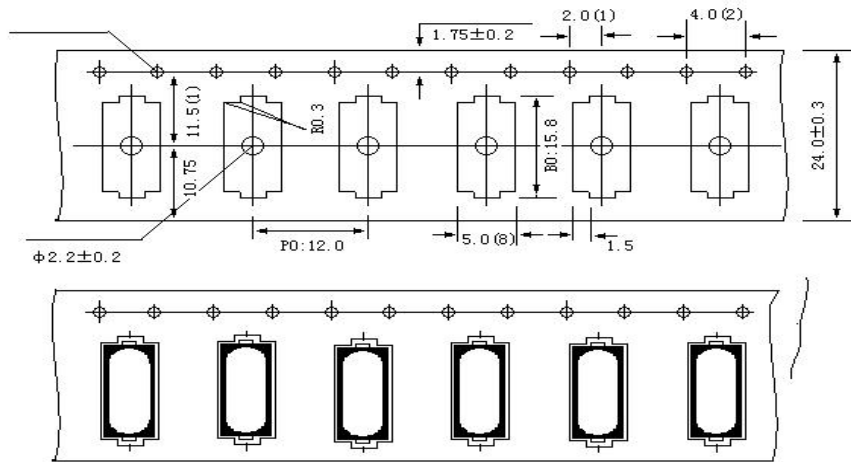
Quartz Crystal Marking



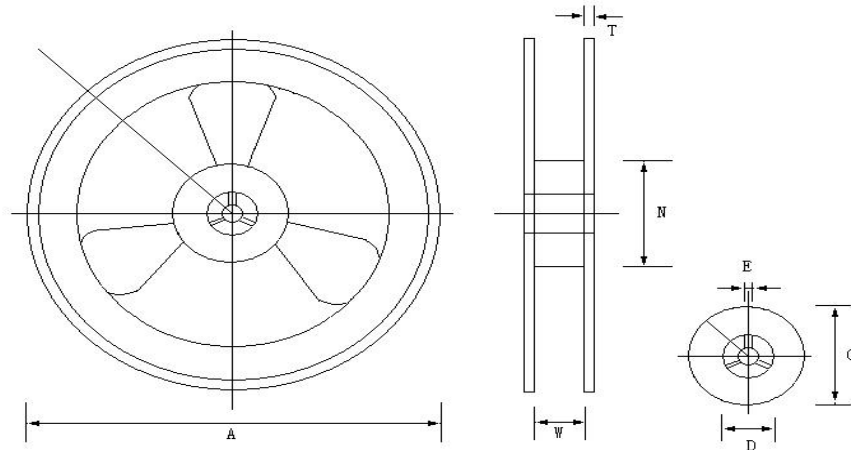
深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
HC-49SMD		Date: 2023/10/17

四、包装要求
Packaging

1. 编带
Tape



2. 轮
Reel



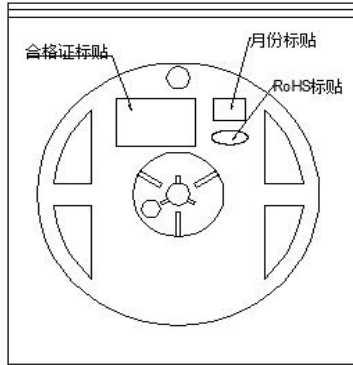
Symbol	A	W	N	C	D	E	T
Dimensions	330	24	99	20.2	13.5	2.5	2.3
Tolerances	± 2.0	+1/0	± 1.0	± 1.0	± 0.5	± 0.5	± 0.5

深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co.,Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
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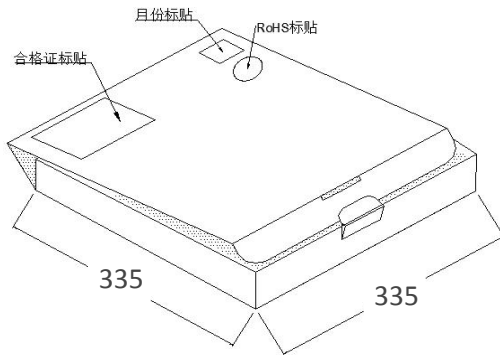
3. 包装

Package

1000只/1卷
1000pcs/Reel

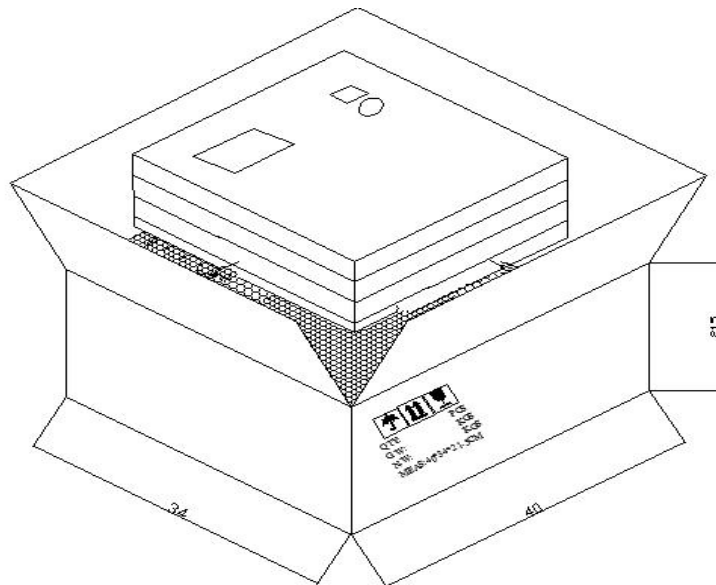


1轮=1盒
1Reel=1Box
Unit: mm



合 格 证	
频率:	型号:
负载:	电阻:
频差:	数量:
日期:	供应商:
批号:	编号:
订单号:	料号:

包装箱
Shipping Carton
40*34*21.5 (5 Box)
Unit: cm



深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	HC-49SMD	Date: 2023/10/17

五、石英晶体可靠性
Reliability Test

NO.	测试项目 Test Item	可靠性条件 Testing Condition	判定标准 Determinant Criteria
1.	跌落 Dropping Test	从75cm高度跌落到30mm厚硬木板上，跌落三次 Drop the resonators from 75cm height to 30mm thick hardwood board, 3times.	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
2.	振动 Vibration	频率 Frequency:10~60Hz; 幅度 Amplitude:0.75mm; 周期 Cycle time:10-55-10Hz: 1min; 振动方向 Direction:X, Y, Z; 振动时间 Duration: 每个方向2小时 2 h/direction.	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
3.	高温 Heat Resistance	温度Temperature: $125^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 时间Time: 720 ± 24 Hours	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
4.	低温 Cold Resistance	温度Temperature: $-40^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 时间Time: 720 ± 24 Hours	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
5.	回流焊 (2次) Reflow (2times)	 <p>回流焊Reflow $260^{\circ}\text{C} \pm 5^{\circ}\text{C} \leq 10\text{s}$</p>	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
6.	耐焊接热 Resistance To Soldering Heat	焊接温度Soldering Heat: $320^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 测试时间Test Time: $3.5\text{s} \pm 0.5\text{s}$;	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
7.	气密性 Leakage	用氦质谱仪进行检测，试验气体: He; 真空度: $1 \times 10^{-3}\text{Pa}$; Helium mass-mass-spectrometer detector, and vacuum and reach $1 \times 10^{-3}\text{Pa}$;	$\leq 1 \times 10^{-8}\text{atm} \cdot \text{cc/S}$
8.	高温高湿 Constant Temperature and Humidity	在温度 $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ，湿度90%~99%，储存720小时，取出2小时后测试; Stored at $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$, Humidity 90%~99% For a period of minimum 720hours. Then $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and 2 hours before testing	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger) Appearance OK
9.	温度冲击 Temperature Shock	低温Low $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (120min) \leftrightarrow 高温High $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (120min); 循环10次; For 10 cycles	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)

(RoHS)

产品规格书

SPECIFICATION FOR APPROVAL

客户名称

Customer Name:

产品名称

Product Name:

贴片石英晶体谐振器

产品型号:

Product Type:

49SS-7SMD

标称频率

Nominal Freq:

6.000000MHz~50.000000MHz

产品编号

Part Coding

规格书编号:

Specification P/N:

客户料号:

Customer P/N:

日期:

Date:

2023-09-26

客户承认

Approved By Customer:

签章

Signature:

日期

Date:



深圳市新天源电子有限公司

SHENZHEN XINTIANYUAN ELECTRONICS CO., LTD.

地址: 深圳市宝安区石岩镇塘头宏发工业园1栋5楼

Add: 5/f.,Block 1,Hongfa Industrial Estate,Tangtou village,Shiyan Town,Baoan district,Shenzhen,Guangdong,China.

电话Tel: 0755-27650903

传真Fax: 0755-29833253

联系人: 王后勤(小姐)

手机: 13728612903

E-mail: xty@chinaxty.cn

网址: [//www.chinaxty.cn](http://www.chinaxty.cn)

批准

Accepted

杜知清

审核

Checked

熊伟

编制

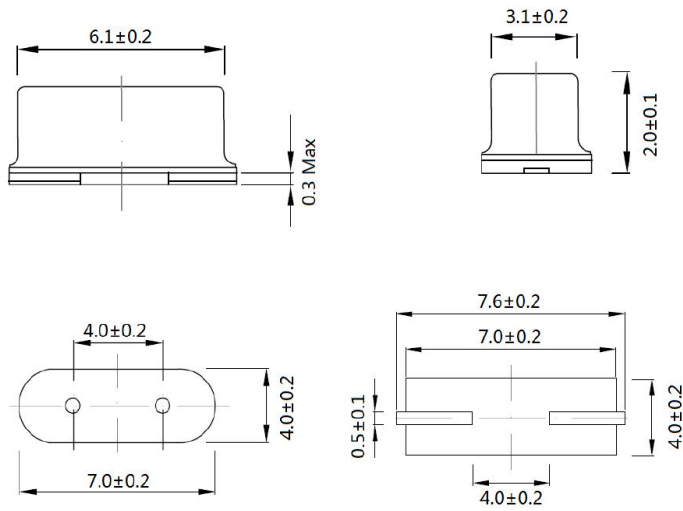
Issued

陈梅东

<p>深圳市新天源电子有限公司</p>	<p>石英晶体谐振器规格书 Specification of Quartz Crystal</p>	<p>NO:</p>
<p>Shenzhen Xintianyuan Electronics Co., Ltd.</p>	<p>无源 49SS-7SMD</p>	<p>Date: 2023/09/26</p>
<p>一、石英晶体规格参数 Quartz Crystal Specification Parameters</p>		
<p>1、产品型号 Holder Type</p>	<p>49SS-7SMD</p>	
<p>2、标称频率 Nominal Frequency</p>	<p>6.000000MHz~50.000000MHz</p>	
<p>3、振动模式 Mode of Oscillation</p>	<p>Fundamental (AT)</p>	
<p>4、调整频差 Frequency Tolerance at 25°C±2°C</p>	<p>±10ppm at 25°C±2°C</p>	
<p>5、等效电阻 Equivalent Resistance(ESR)</p>	<p>≤40 Ω ~120 Ω</p>	
<p>6、负载电容 Load Capacitance(CL)</p>	<p>4pF~32pF</p>	
<p>7、温度频差 Temperature Characteristics</p>	<p>±20ppm</p>	
<p>8、工作温度范围 Operating Temperature range</p>	<p>-20~+70°C</p>	
<p>9、储存温度范围 Storage Temperature range</p>	<p>-40~+85°C</p>	
<p>10、激励功率 Drive Level</p>	<p>100uW</p>	
<p>11、静态电容 Shunt Capacitance (C0)</p>	<p><4.0pF</p>	
<p>12、绝缘电阻 Insulation Resistance</p>	<p>≥500M Ω (DC100V±15V)</p>	
<p>13、测试仪器 Measure Instrument</p>	<p>KH1240</p>	
<p>14、年老化率 Aging Rate a Year</p>	<p>≤±3ppm/年</p>	

深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	无源 49SS-7SMD	Date: 2023/09/26

二、石英晶体尺寸、结构 Quartz Crystal Dimensions And Structure



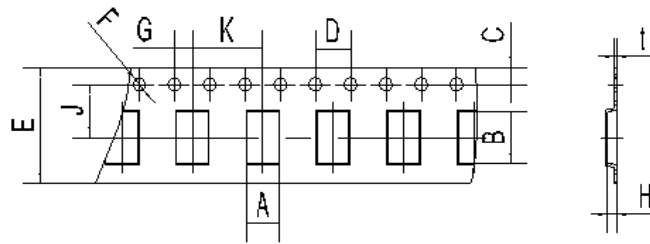
三、石英晶体印字 Quartz Crystal Marking



深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	无源 49SS-7SMD	Date: 2023/09/26

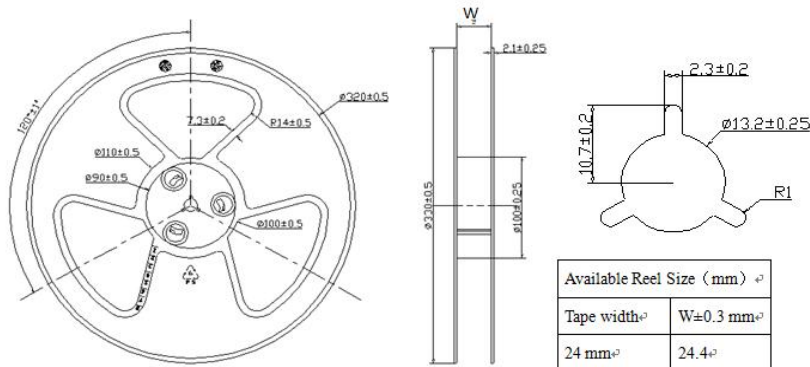
四、包装要求 Packaging

1. 编带 Tape



A	B	C	D	E	F
4.5+/-0.1	8.0+/-0.1	1.75+/-0.1	4.0+/-0.1	16.0+/-0.3	φ1.5+0.1/-0
G	H	J	K	t	
2.0+/-0.1	2.5+/-0.1	11.5+0.1/0	8.0+/-0.1	0.35+/-0.05	

2. 轮 Reel



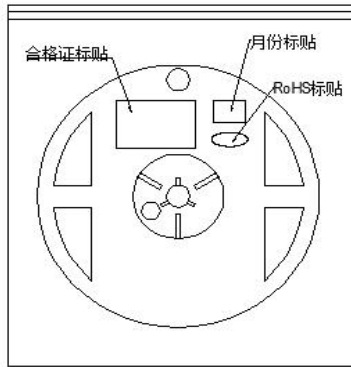
Available Reel Size (mm) ◊	
Tape width◊	W=0.3 mm◊
24 mm◊	24.4◊

深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co.,Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	无源 49SS-7SMD	Date: 2023/09/26

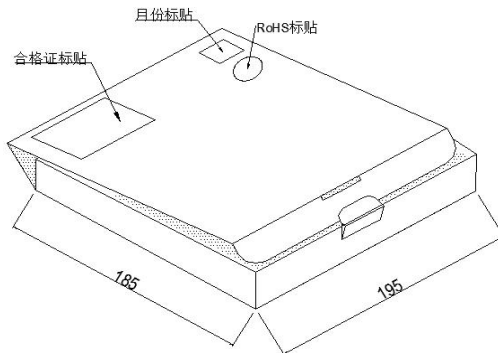
3. 包装

Package

3000只/1卷
3000pcs/Reel



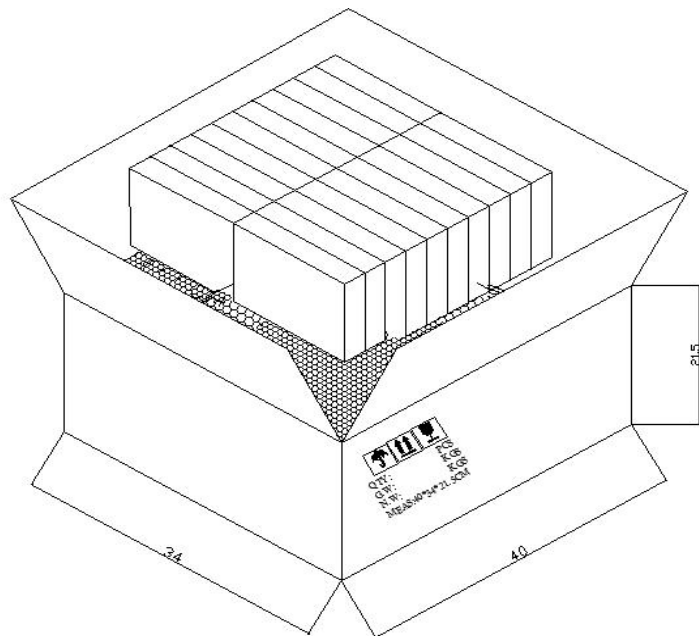
1轮=1盒
1Reel=1Box
Units: mm



合格证	
频率:	型号:
负载:	电阻:
频差:	数量:
日期:	供应商:
批号:	编号:
订单号:	料号:

包装箱
Shipping Carton

40*34*21.5 (20 Box)
27*20*32.2 (12 Box)
27*20*20 (8 Box)
Units: cm



深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	无源 49SS-7SMD	Date: 2023/09/26

五、石英晶体可靠性
Reliability Test

NO.	测试项目 Test Item	可靠性条件 Testing Condition	判定标准 Determinant Criteria
1.	跌落 Dropping Test	从75cm高度跌落到30mm厚硬木板上, 跌落三次 Drop the resonators from 75cm height to 30mm thick hardwood board, 3times.	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
2.	振动 Vibration	频率 Frequency:10~60Hz; 幅度 Amplitude:0.75mm; 周期 Cycle time:10-55-10Hz: 1min; 振动方向 Direction:X, Y, Z; 振动时间 Duration: 每个方向2小时 2 h/direction.	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
3.	高温 Heat Resistance	温度Temperature: $125^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 时间Time: 720 ± 24 Hours	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
4.	低温 Cold Resistance	温度Temperature: $-40^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 时间Time: 720 ± 24 Hours	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
5.	回流焊 (2次) Reflow (2times)	 <p>回流焊Reflow $260^{\circ}\text{C} \pm 5^{\circ}\text{C} \leq 10\text{s}$</p>	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
6.	耐焊接热 Resistance To Soldering Heat	焊接温度Soldering Heat: $320^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 测试时间Test Time: $3.5\text{s} \pm 0.5\text{s}$;	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
7.	气密性 Leakage	用氦质谱仪进行检测, 试验气体: He; 真空度: $1 \times 10^{-3}\text{Pa}$; Helium mass-mass-spectrometer detector, and vacuum and reach $1 \times 10^{-3}\text{Pa}$;	$\leq 1 \times 10^{-8} \text{atm} \cdot \text{cc/S}$
8.	高温高湿 Constant Temperature and Humidity	在温度 $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$, 湿度90%~99%, 储存720小时, 取出2小时后测试; Stored at $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$, Humidity 90%~99% For a period of minimum 720hours. Then $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and 2 hours before testing	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger) Appearance OK
9.	温度冲击 Temperature Shock	低温Low $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (120min) \leftrightarrow 高温High $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (120min); 循环10次; For 10 cycles	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)

(RoHS)

产品规格书

SPECIFICATION FOR APPROVAL

客户名称:

Customer Name:

产品名称:

Product Name:

石英晶体谐振器

产品型号:

Product Type:

HC-49S (3pin)

标称频率:

Nominal Freq:

3.2000000MHz~100.000000MHz

产品编号:

Part Coding

规格书编号:

Specification P/N:

客户料号:

Customer P/N:

日期:

Date:

2023-10-17

客户承认

Approved By Customer:

签章

Signature:

日期

Date:



深圳市新天源电子有限公司

SHENZHEN XINTIANYUAN ELECTRONICS CO., LTD.

地址: 深圳市宝安区石岩镇塘头宏发工业园1栋5楼

Add: 5/f.,Block 1,Hongfa Industrial Estate,Tangtou village,Shiyan Town,Baoan district,Shenzhen,Guangdong,China.

电话Tel: 0755-27650903 传真Fax: 0755-29833253

联系人: 王后勤(小姐) 手机: 13728612903

E-mail: xty@chinaxty.cn 网址: //www.chinaxty.cn

批准
Accepted

杜知清

审核
Checked

熊伟

编制
Issued

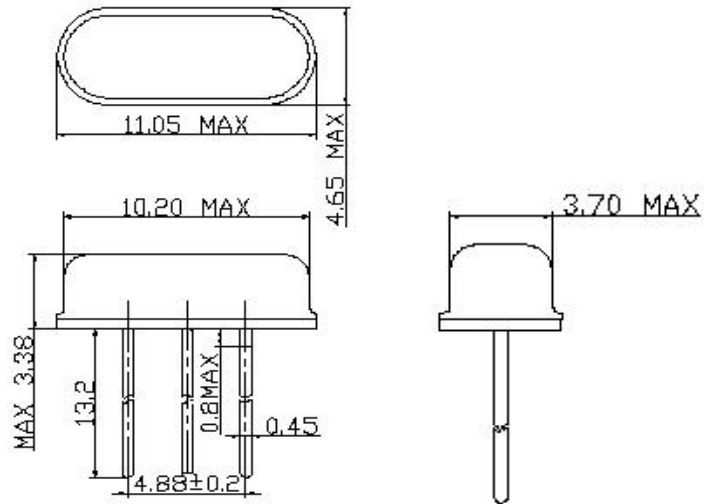
陈梅东

<p>深圳市新天源电子有限公司</p>	<p>石英晶体谐振器规格书 Specification of Quartz Crystal</p>	<p>NO:</p>
<p>Shenzhen Xintianyuan Electronics Co., Ltd.</p>	<p>HC-49S (3pin)</p>	<p>Date: 2023/10/17</p>
<p>一、石英晶体规格参数 Quartz Crystal Specification Parameters</p>		
<p>1、产品型号 Holder Type</p>	<p>HC-49S (3pin)</p>	
<p>2、标称频率 Nominal Frequency</p>	<p>3. 2000000MHz~100. 000000MHz</p>	
<p>3、振动模式： Mode of Oscillation</p>	<p>Fundamental</p>	
<p>4、调整频差 Frequency Tolerance at 25°C±2°C</p>	<p>±10ppm at 25°C±2°C</p>	
<p>5、等效电阻 Equivalent Resistance(ESR)</p>	<p>≤30 Ω ~120 Ω</p>	
<p>6、负载电容 Load Capacitance(CL)</p>	<p>4pF~32pF</p>	
<p>7、温度频差 Temperature Characteristics</p>	<p>±20ppm/±30ppm</p>	
<p>8、工作温度范围 Operating Temperature range</p>	<p>-20~+70°C / -40~+85°C</p>	
<p>9、储存温度范围 Storage Temperature range</p>	<p>-40~+85°C</p>	
<p>10、激励功率 Drive Level</p>	<p>100uW</p>	
<p>11、静态电容 Shunt Capacitance (C0)</p>	<p><4. 0pF</p>	
<p>12、绝缘电阻 Insulation Resistance</p>	<p>≥500M Ω (DC100V±15V)</p>	
<p>13、测试仪器 Measure Instrument</p>	<p>KH1240</p>	
<p>14、年老化率 Aging Rate a Year</p>	<p>≤±3ppm/年</p>	

深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	HC-49S (3pin)	Date: 2023/10/17

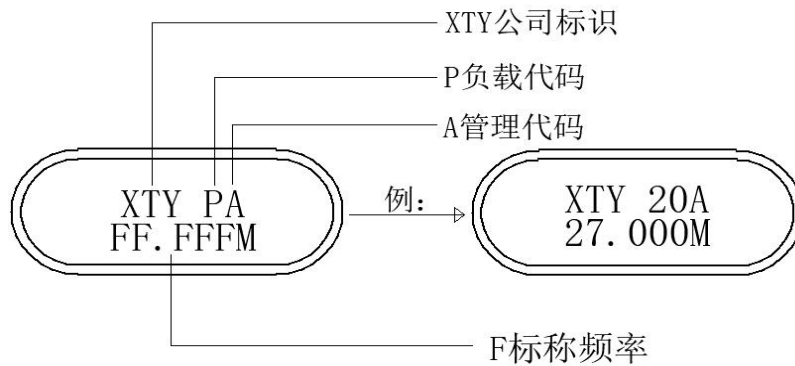
二、石英晶体尺寸、结构

Quartz Crystal Dimensions And Structure



三、石英晶体印字

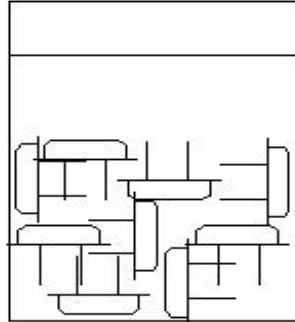
Quartz Crystal Marking



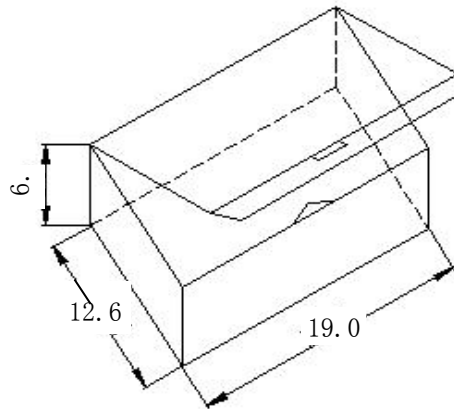
深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co.,Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	HC-49S (3pin)	Date: 2023/10/17

四、包装
Package

200只/1包
200pcs/Bag



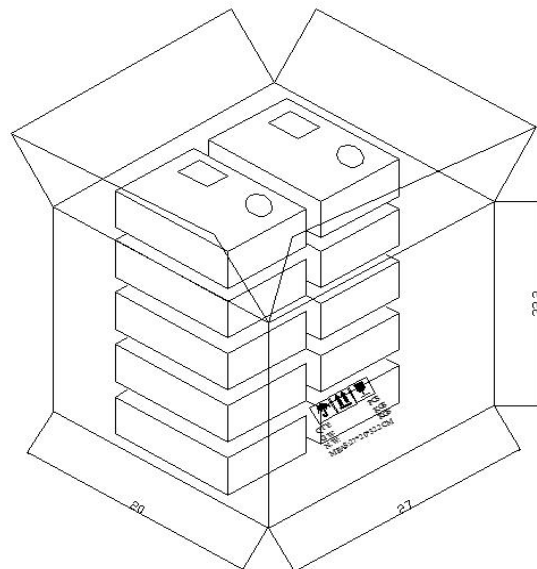
10包=1盒
10Bag=1Box
Units: cm



合格证	
频率:	型号:
负载:	电阻:
频差:	数量:
日期:	供应商:
批号:	编号:
订单号:	料号:

包装箱
Shipping Carton

27*20*32.2 (10 Box)
27*20*20 (6 Box)
Units: cm



深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO:
	HC-49S (3pin)	Date: 2023/10/17

五、石英晶体可靠性
Reliability Test

NO.	测试项目 Test Item	可靠性条件 Testing Condition	判定标准 Determinant Criteria
1.	跌落 Dropping Test	从75cm高度跌落到30mm厚硬木板上，跌落三次 Drop the resonators from 75cm height to 30mm thick hardwood board, 3times.	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
2.	振动 Vibration	频率 Frequency:10~60Hz; 幅度 Amplitude:0.75mm; 周期 Cycle time:10-55-10Hz: 1min; 振动方向 Direction:X, Y, Z; 振动时间 Duration: 每个方向2小时 2 h/direction.	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
3.	高温 Heat Resistance	温度Temperature: $125^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 时间Time: 720 ± 24 Hours	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
4.	低温 Cold Resistance	温度Temperature: $-40^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 时间Time: 720 ± 24 Hours	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
5.	回流焊 (2次) Reflow (2times)	<p>回流焊Reflow $260^{\circ}\text{C} \pm 5^{\circ}\text{C} \leq 10\text{s}$</p>	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
6.	耐焊接热 Resistance To Soldering Heat	焊接温度Soldering Heat: $320^{\circ}\text{C} \pm 10^{\circ}\text{C}$ 测试时间Test Time: $3.5\text{s} \pm 0.5\text{s}$;	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)
7.	气密性 Leakage	用氦质谱仪进行检测，试验气体: He; 真空度: $1 \times 10^{-3}\text{Pa}$; Helium mass-mass-spectrometer detector, and vacuum and reach $1 \times 10^{-3}\text{Pa}$;	$\leq 1 \times 10^{-8} \text{atm} \cdot \text{cc/S}$
8.	高温高湿 Constant Temperature and Humidity	在温度 $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ，湿度90%~99%，储存720小时，取出2小时后测试; Stored at $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$, Humidity 90%~99% For a period of minimum 720hours. Then $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and 2 hours before testing	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger) Appearance OK
9.	温度冲击 Temperature Shock	低温Low $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (120min) \leftrightarrow 高温High $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (120min); 循环10次; For 10 cycles	$\Delta FL \leq \pm 5\text{ppm}$ $\Delta RS \leq \pm 10\%$ or 5Ω (whichever is larger)

(RoHS)

产 品 规 格 书

SPECIFICATION FOR APPROVAL

客户名称:
Customer Name: _____

产品名称:
Product Name: 石英晶体谐振器

产品型号:
Product Type: HC-49S (2pin)

标称频率:
Nominal Freq: 3.2000000MHz~100.000000MHz

产品编号:
Part Coding _____

规格书编号:
Specification P/N: _____

客户料号:
Customer P/N: _____

日期:
Date: 2023-10-08

客户承认
Approved By Customer:

签章
Signature: _____

日期
Date: _____



深圳市新天源电子有限公司

SHENZHEN XINTIANYUAN ELECTRONICS CO., LTD.

地 址: 深圳市宝安区石岩镇塘头宏发工业园1栋5楼

Add: 5/f.,Block 1,Hongfa Industrial Estate,Tangtou village,Shiyan Town,Baoan district,Shenzhen,Guangdong,China.

电话Tel: 0755-27650903 传真Fax: 0755-29833253

联系人: 王后勤 (小姐) 手机: 13728612903

E-mail: xyt@chinaxyty.cn 网 址: [//www.chinaxyty.cn](http://www.chinaxyty.cn)

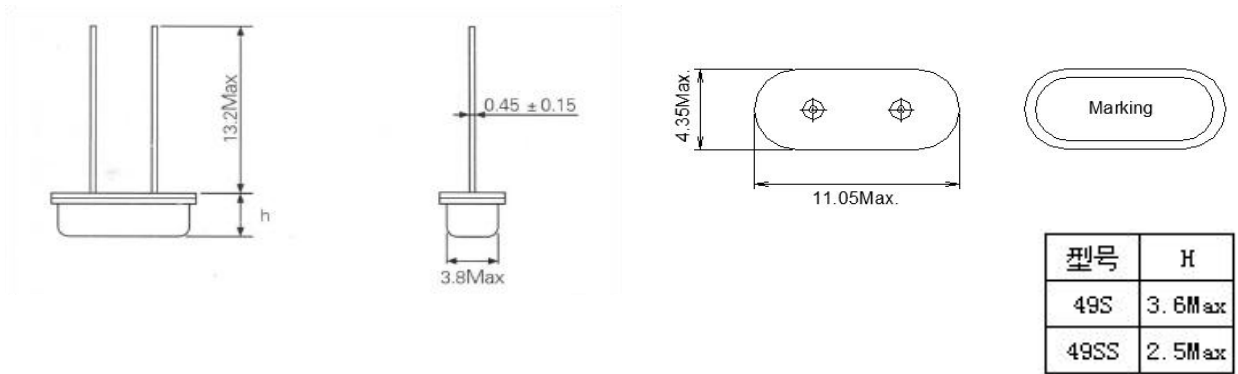
批准 Accepted 杜知清 审核 Checked 熊伟 编制 Issued 陈梅东

<p>深圳市新天源电子有限公司</p>	<p>石英晶体谐振器规格书 Specification of Quartz Crystal</p>	<p>NO</p>
<p>Shenzhen Xintianyuan Electronics Co., Ltd.</p>	<p>HC-49S</p>	<p>Date: 2023/10/08</p>
<p>一、石英晶体规格参数 Quartz Crystal Specification Parameters</p>		
<p>1、产品型号 Holder Type</p>	<p>HC-49S</p>	
<p>2、标称频率 Nominal Frequency</p>	<p>3. 2000000MHz~100. 000000MHz</p>	
<p>3、振动模式： Mode of Oscillation</p>	<p>Fundamental</p>	
<p>4、调整频差 Frequency Tolerance at 25°C±2°C</p>	<p>±10ppm at 25°C±2°C</p>	
<p>5、等效电阻 Equivalent Resistance(ESR)</p>	<p>≤30 Ω ~ 120 Ω</p>	
<p>6、负载电容 Load Capacitance(CL)</p>	<p>4pF~32pF</p>	
<p>7、温度频差 Temperature Characteristics</p>	<p>±20ppm/±30ppm</p>	
<p>8、工作温度范围 Operating Temperature range</p>	<p>-20~+70°C / -40~+85°C</p>	
<p>9、储存温度范围 Storage Temperature range</p>	<p>-40~+85°C</p>	
<p>10、激励功率 Drive Level</p>	<p>100uW</p>	
<p>11、静态电容 Shunt Capacitance (C0)</p>	<p><4. 0pF</p>	
<p>12、绝缘电阻 Insulation Resistance</p>	<p>≥500M Ω (DC100V±15V)</p>	
<p>13、测试仪器 Measure Instrument</p>	<p>KH1240</p>	
<p>14、年老化率 Aging Rate a Year</p>	<p>≤±3ppm/年</p>	

深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO
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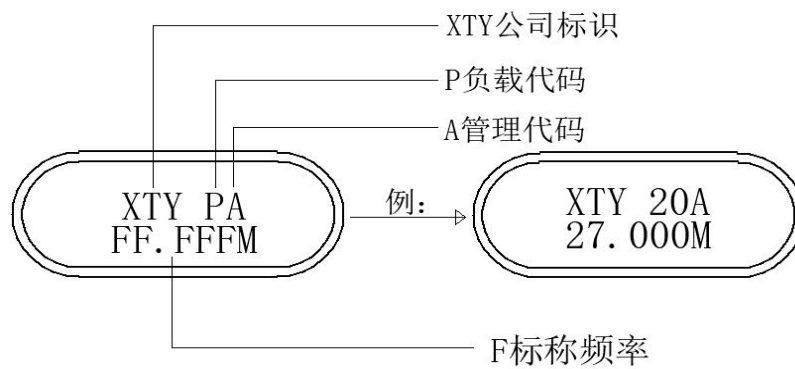
二、石英晶体尺寸、结构

Quartz Crystal Dimensions And Structure



三、石英晶体印字

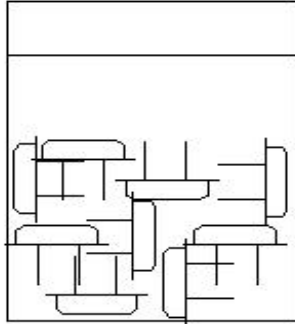
Quartz Crystal Marking



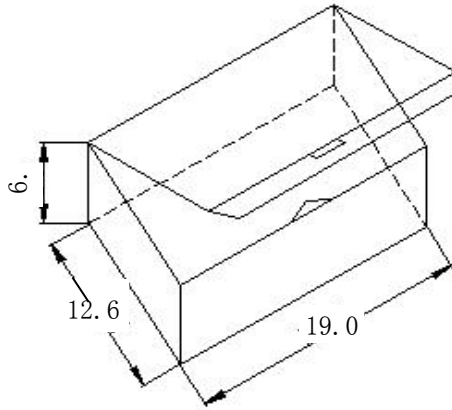
深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co.,Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO
	HC-49S	Date: 2023/10/08

四、包装
Package

200只/1包
200pcs/Bag



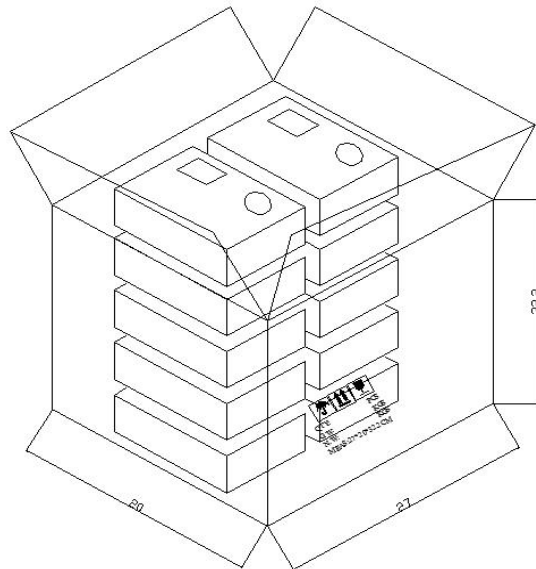
10包=1盒
10Bag=1Box
Units: cm



合格证	
频率:	型号:
负载:	电阻:
频差:	数量:
日期:	供应商:
批号:	编号:
订单号:	料号:

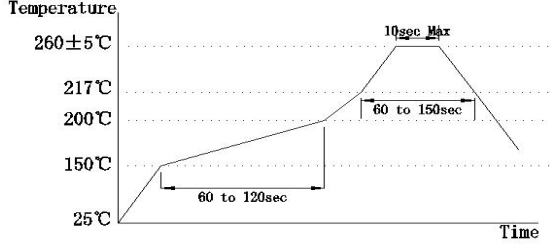
包装箱
Shipping Carton

27*20*32.2 (10 Box)
27*20*20 (6 Box)
Units: cm



深圳市新天源电子有限公司 Shenzhen Xintianyuan Electronics Co., Ltd.	石英晶体谐振器规格书 Specification of Quartz Crystal	NO
	HC-49S	Date: 2023/10/08

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