



规 格 书
SPECIFICATIONS

规格书编号/ID: M135601820A

物料描述/

Product Description: 13.560M 18PF 20PPM

料号/

Part Number: S47SMD13.560M18PF20R30B3

制作人/

Approved by: 莫平会

审核人/

Checked by: 陈晓群

日期/ 盖章/

Date: 2022-12-30 Stamp: _____

**客户签署/
Customer signature required**

公司名称/

Company: _____

客户料号/

Customer Part Number: _____

承认人/

Approved by: _____

批准人/

Confirmed by: _____

日期/

Date: _____

盖章/

Stamp: _____



四川索斯特电子有限公司
Sichuan Source-Set Electronics Co., Ltd
石英晶体规格书
CRYSTAL UNIT SPECIFICATIONS



一、电性能参数 ELECTRICAL PARAMETERS:

No.	特性 Characteristic	范围 Limits	备注 Remark
1	产品型号 Ackage Type	SST-M49SSMD	
2	标称频率 Nominal Frequency	13.560MHz	
3	振动模式 Mode of Vibration	AT—Fund (基频)	
4	常温频差 Frequency Tolerance	±20ppm	25±3°C 测试 Measure at 25°C±3°C
5	工作温度范围 Operating Temperature Range	-20°C~+70°C	
6	频率稳定度 Frequency Stability	±30ppm	
7	储存温度范围 Storage Temperature Range	-40°C~+85°C	
8	负载电容 Load capacitance	18pF	
9	谐振电阻 Equivalent Series Resistance	50 Ω max	
10	激励功率 Drive Level	100 μW max	
11	绝缘电阻 Insulation Resistance	500M Ω	At 250V _{DC}
12	静电容 Shunt Capacitance	5pF max	
13	年老化率 Aging Per Year	±5ppm	
14			
15			
16			
17			
18			



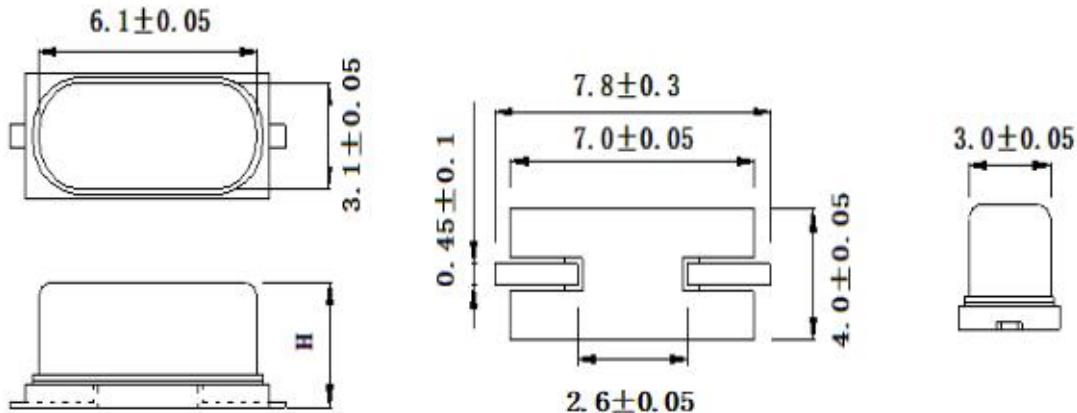
四川索斯特电子有限公司
Sichuan Source-Set Electronics Co., Ltd
石英晶体规格书
CRYSTAL UNIT SPECIFICATIONS



二、可靠性试验 Reliability test

No.	测试项目 Item	测试条件 Test Conditions	判定标准 Basis of Verdict
1	跌落冲击 Drop	75cm 高度自由下落到 3cm 厚度的硬质木板 3 次 3 Times Free Fall from 75cm height table to 3cm thickness hard wood board	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
2	模拟回流焊 Reflow	240°C $\leq T \leq 265^\circ\text{C}$ t=60±30s T=260°C±5°C t=40±10s T(max)= 265°C	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
3	可焊性 Solder	260°C ± 5°C 焊锡槽浸润 3±0.5 秒 Temperature: 260°C ± 5°C Time: 3±0.5 Seconds	新锡覆盖率 $\geq 90\%$ the solder immersion surface $\geq 90\%$
4	耐焊接热 Solder Heating	280°C ± 5°C 焊锡槽浸润 10±1 秒 Temperature: 280°C ± 5°C Time: 10±1 Seconds	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
5	高温储存 High temperature storage	100°C ± 2°C 烘箱中烘烤 96±1 小时 Temperature: 100°C ± 5°C Time: 96±1 Hours	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
6	高温老化 High temperature ageing	85°C ± 5°C 之烘箱中烘烤 30 天 Temperature: 85°C ± 5°C, Time: 30days	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
7	低温储存 Low temperature storage	-40°C ± 2°C 环境中保持 96±1 小时 Temperature: -40°C ± 2°C Time: 96±1 Hours	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
8	恒温恒湿 Humidity	在湿度为 90~95%, 温度为 40±2°C 环境中保持 96 小时 Temp: 40°C ± 2°C, Humidity: 90~95% Times: 96 Hours	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$
9	振动 Vibration	频率: 10~50Hz, 幅度: 0.75mm 频率: 50Hz~500Hz, 加速度幅度: 98m/s ² 周期: 10~500~10Hz, 15min 振动方向: X、Y、Z 振动时间: 每个方向 2 小时 Frequency: 10~50Hz, Amplitude: 0.75mm Frequency: 50~500Hz, Amplitude: 98m/s ² Cycle time: 10~500~10H, 15min Direction: X、Y、Z Duration: 2 Hours / direction	$\Delta F \leq \pm 5\text{ppm}$, $\Delta R \leq 5\text{ohm}$ or $\leq 10\%$

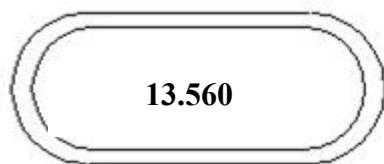
三、外形尺寸 Outline Dimensions (unit: mm)



NO.	规格	H
1.	M49S-SMD	2.3Max

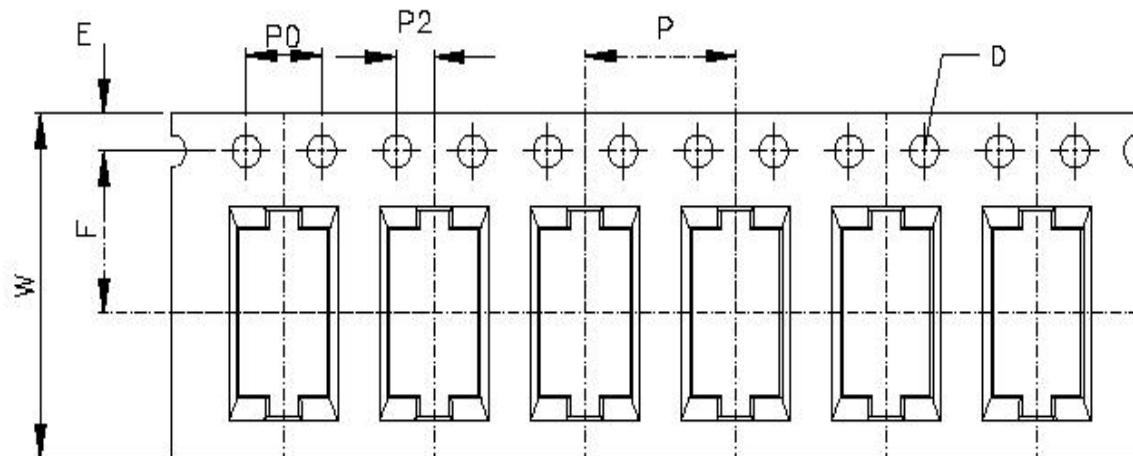
四、印字 Marking

当前字样:



五、包装方式 Packing

T/R: 3000pcs/ REEL



单位 units : mm:

Model	A	B	D	E	F	P	P0	T	W
SST-47SMD	4.7 ± 0.1	9.5 ± 0.1	$\Phi 1.5$	1.75 ± 0.1	7.5 ± 0.1	8.0 ± 0.1	4.0 ± 0.1	0.3 ± 0.05	16 ± 0.3

SPEC 1	12	16	24	32	44	56	72	88
C1±1	330	330	330	330	330	330	330	330
A±0.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
B±0.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
H+2.0	12.5	16.5	24.5	32.5	44.5	56.5	72.5	88.5
T±0.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
D±0.5	ø100							

