

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:	49S 插件晶振	
规格型号:	49S 3pin 12.000MHZ 20PF ±20PPM -40~85℃	
P N/ SJK:	6B3S12000F20UCG	
环保属性:	☒ RoHS ☒ REACH ☒ HF ☐ PAHS ☐ 其它	
版 次:	A1 2017-6-10 初版	最小包装 1K/盘
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	李相同	刘惠光			
SJK 支持			盖章签署		
FAE_EMAIL			日 期		
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备注:					

Quartz Crystal



HC-49S/SS 6B Series

FEATURE

- Resistance welded type crystal units.
- A great number of standard frequencies.
- Higher frequency pullability and lower equivalent series resistance.
- Lower cost and highly mass production capability.
- The best choice of TV,STB,LCDM and Cable Modem.
- RoHS Compliant/Pb Free.

ELECTRICAL SPECIFICATIONS

Nominal frequency	12.000MHz
Oscillation mode	Fundamental
Load capacitance	20PF
Frequency tolerance	$\pm 20\text{PPM}$ at $25 \pm 3^\circ\text{C}$
Equivalent series resistance	30 Ω Max
Operating temperature range	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Storage temperature range	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Frequency Stability Over Operating Temperature	$\pm 30\text{PPM}$
Parallel capacitance(C_0)	7PF Max
Drive level	100 μW
Insulation resistance	More than 500M Ω AT DC100V
Aging @25°C 1 st year (Max)	$\pm 3\text{ppm/year}$

MARKING:

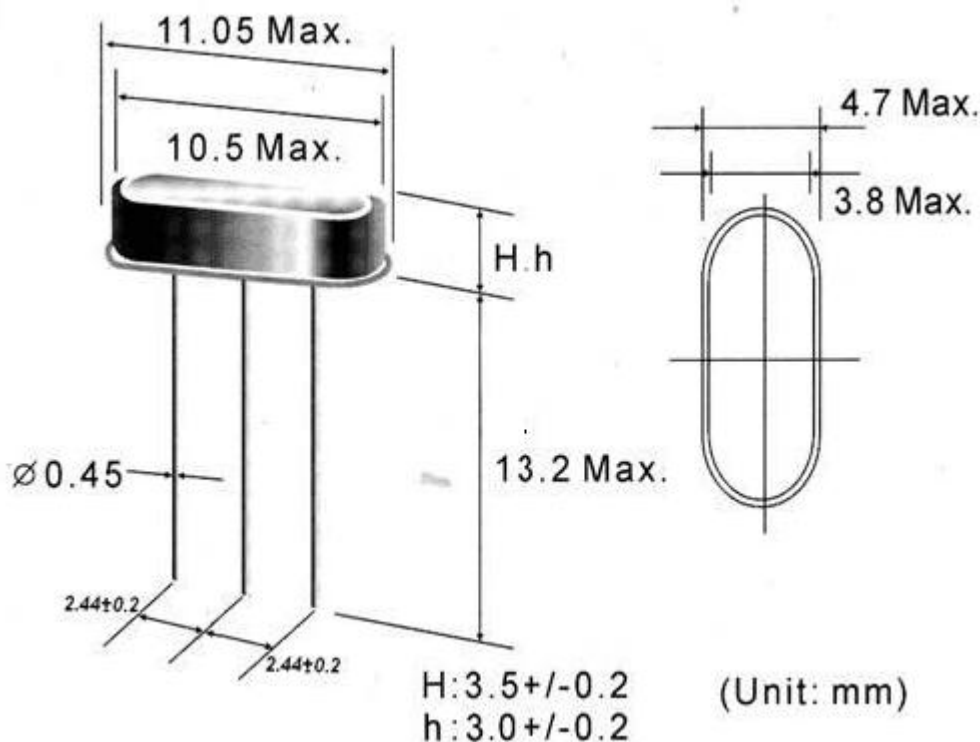


Quartz Crystal

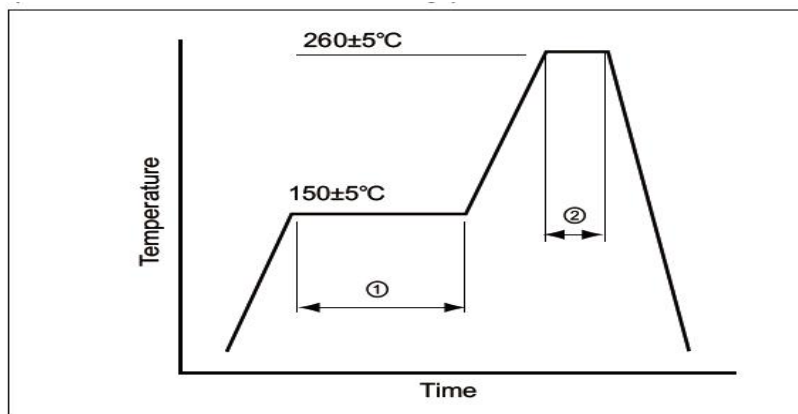
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Dimension



Wave soldering temperature curve



①	Preheat	150±5°C	120sec.
②	Peak	260°C	10sec. max.

Total time 200sec. max. Solder melting point: 185°C

The reflow temperature profile may vary depending on the product model, specifications and frequency rang. Refer to the individual product specifications for details.

RELIABILITY TEST SPECIFICATION

Test item	Equipment	Condition	Specification
1. TERMINAL STRENGTH TEST	Pull equipment	1. 10N FORCE IN AXES OF TERMINATION 10±1SEC 2. 2.5MM FROM TERMINAL, BEND 90°	'1. MIL-STD-202F,METHOD 211A
2.SOLDERABILITY TEST	SJK-REL001、RC-328A	1.solderability:235±5℃, 5±0.5S 2.heat resistance:260±5℃,10±1S restoration of 1 hour	'1. MIL-STD-883CMETHOD 2003.7 2. MIL-STD-202F,METHOD 210A
3. HERMETICITY TEST	UL-306S	small and do not control roughly (hubble-bubble machine); Nothing air bubble creation s thin leave out 1 * 10 E-8 ATM.CC/SEC.	MIL-STD-883C METHOD 1014.9
4. VIBRATION TEST	HG-V4、S&A 250B	Enable Crystal(10g) from 10-55-10Hz,X、Y、Z horizontal,1 Minute vibration/time, 1time/ 2 hours.	JIS C5025 TESTAMIL-STD-883C,METHOD 2007.2
5. MECHANICAL SHOCK	HPC-200、S&A 250B	Enable Crystal 50G(490m/s ²) time=11 ms speed=3.4 m/s half sine wave oscillation	JIS C5026 MIL-STD-883C,METHOD 2002
6. DROP TEST	HARDBOARD.S&A250B	75CM HIGH,3 TIMES ON HARD BOARD	'JIS C6701
7. SALT SPRAY	H-SST-60、RC-328A	5% NaCL,35℃±2℃ CHAMBER,48 hrs. , PH:6.5~7.2	JIS C5028 & MILSTD202F'METHOD 101D
8. HIGH&LOW TEMP STORAGE TEST(Static test)	H-PTH-80CK & HM101-3ABN, S&A 350B/250B	High temperature: 125℃±2℃,1000hr; Low temperature:-40℃±3℃,1000hrs	MIL-STD-883C,METHOD 1011.8& JIS C5030
9. TEMP & HRM CYCLING TEST	H-PTH-80CK CHAMBER , S&A 350B/250B	Temperature:-10℃±2℃ ~ 65℃±2℃,Humidity:93±3%,1 cycle need 24 hrs. 5cycles.	MIL-STD-883C,METHOD 1010.7
10. HIGH TEM. & HUM. STORAGE TEST	H-PTH-80CK CHAMBER , S&A350B/250B	temperature:40℃±2 , Humidity:85+3,-2%,Store 96 hrs	JIS C5023
11. AGING TEST	H-PTH-80CK CHAMBER , S&A350B/250	temperature: 85℃±2, 1000hrs	JIS C5031