

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:	贴片晶振				
规格型号:	M49SSMD	12.000MHZ	12PF	±10PPM	-20~70℃ 73*32 矮壳
P N/ SJK:	6CA12000E12UBG				
环保属性:	☒ RoHS	☒ REACH	☒ HF	☐ PAHS	☐ 其它
版 次:	A1 2022-7-1 初版			最小包装: 1000 只/包	
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				
日 期			批示: ☐ 接受 ☐ 有条件接受				
备注:							

FEATURE

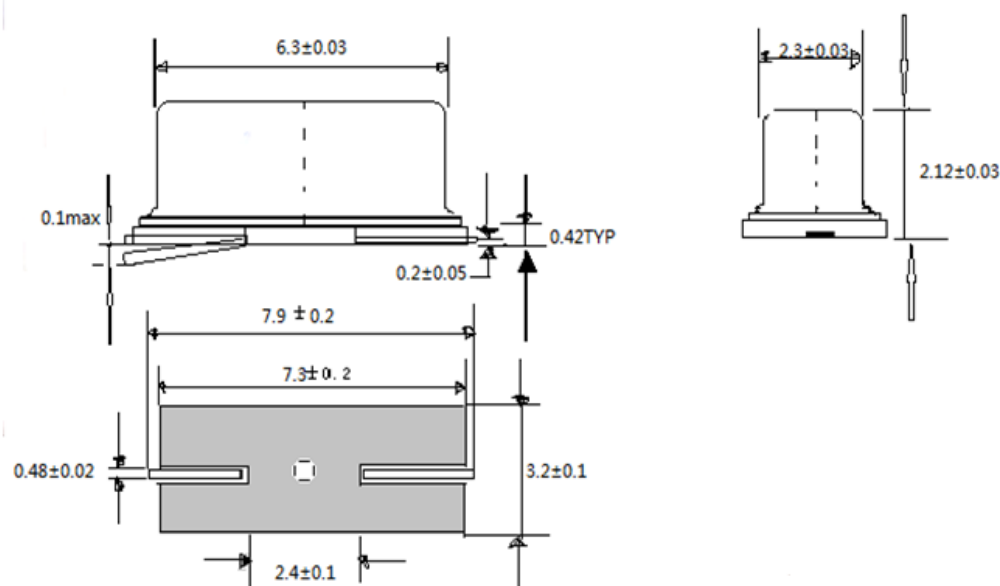
- Surface mount type crystal units.
- A great number of standard frequencies.
- Higher frequency pullability and lower equivalent series resistance.
- Highly mass production capability.
- The best choice of TV,STB,LCDM and Cabbage Modem.
- RoHS Compliant/Pb Free.

ELECTRICAL SPECIFICATIONS

Nominal Frequency	12.000MHz
Mode	Fundamental
Frequency Tolerance (at 25°C)	±10ppm
Frequency Stability Over Operating Temperature Characteristics	±30ppm
Operating Temperature Range	-20°C to +70°C
Storage Temperature Range	-55°C to +125°C
Shunt Capacitance (C0)	≤7.0 PF Max
Driver Level (DL)	100μW Typical
Load Capacitance(CL)	12PF
Equivalent Series Resistance(ESR)	20Ω Max
Insulation resistance	More than 500MΩ AT DC100V
Aging @25°C first year (Max)	±3ppm/year

REMARK: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE,
PLEASE CONFIRM WITH OUR SALES ENGINEER.

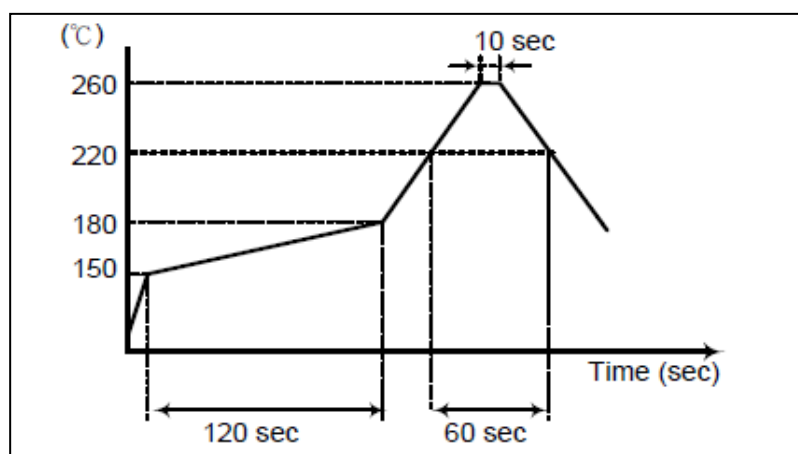
DIMENSION (Unit: mm)



MARK

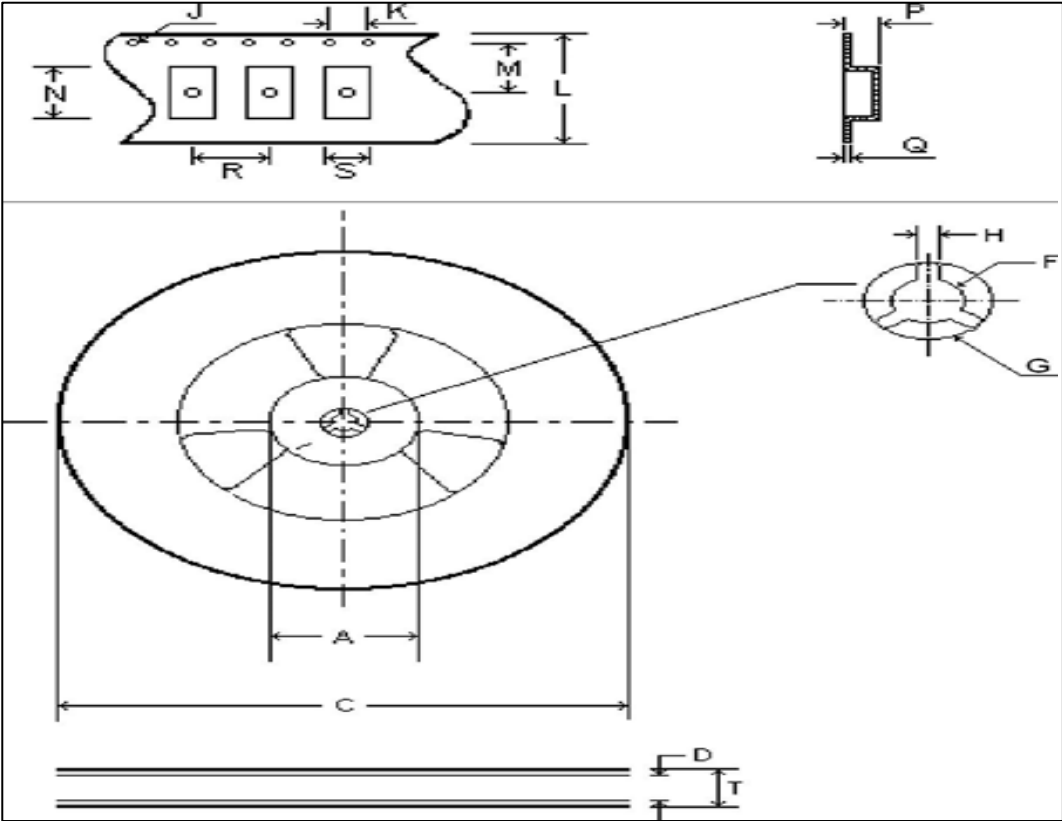


REFLOW CONDITION



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

CARRIER TYPE



Symbol	A	C	D	T	F	G	H
Dimensions	100±1.0	330±2.0	16.4±1.0	20.4±0.5	13.0±0.2	20.2MIN	1.5MIN
Symbol	J	K	L	M	N	P	Q
Dimensions	∅ 1.5	4.0±0.1	16.0±0.3	7.5±0.1	9.4±0.1	2.5±0.1	0.3±0.05
Symbol	R	S					
Dimensions	8.0±0.1	4.4±0.1					

RELIABILITY TEST SPECIFICATIONS

Test item	Equipment	Condition	Specification
1.SOLDERABILITY TEST	SJK-REL001、RC-328A	TP:260℃ TsMax: 200℃ TsMin: 150℃ 2 time 	MIL-STD-883E Method 2003.7
2. HERMETICITY TEST	HELIOT-306S	Pressurized 0.4~0.5Mpa ethanol sealed tank for 10 minutes	MIL-STD-883E Method 1014.10
3. 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.	MIL-STD-883E Method 2007.3
4. 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 C6701
5. DROP TEST	HARD BOARD.S&A250B	75cm High,3 times on hard board	MIL-STD-202F Method 213B
6. 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-STD883C, METHOD 1011.8
7. TEMP & HUM CYCLING TEST	H-PTH-80CK CHAMBE, S&A 350B/250B	Temperature:-10℃±2℃~65℃±2℃,Humidity:93±3%,1 cycle need 24 hrs. 5cycles.	MIL-STD-883E Method 1005.8
8. HIGH TEM. & HUM.STORAGE TEST	H-PTH-80CK CHAMBE, S&A350B/250B	Temperature:85℃±2, Humidity:85+3,-2%,Store 96 hrs	JIS C6701
9. AGING TEST	H-PTH-80CK CHAMBE, S&A350B/250	Temperature:85℃±2, Store 1000 hrs	JIS C5023

REVISION RECORD (6CA12000E12UBG)

Rev	Revise contents	Reason	Reviser	Checked	Approved
A1	Initial released	--	贺丹斌	李相同	刘惠光