

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:	插件晶振	
规格型号:	Halfsize半尺寸 12.000MHZ 3.3V ±30PPM -20~70℃	
P N/ SJK:	6MH12000G33YB	
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:					

Crystal Oscillator



CMOS/TTL Output Half Size 6MH Series

FEATURE

- Small Size as small as 12.6×12.6×5.1mm.
- Hybrid IC Circuit Construction.
- CMOS compatible output.
- 5V and 3.3V supply model available.
- All metal, hermetically sealed welded package.
- High precision characteristic covering to high frequency range.
- RoHS and Pb Free compliant.

ELECTRICAL SPECIFICATIONS

Model Tope		Half Size	
Fan Out Type		CMOS	
Supply Range		3.3V	
Frequency Range		12.000MHz,	
Operating Temperature		-20~70℃	
Frepuecy.Range Input Current	0.25MHz~9.999MHz	10mA	
	10.00MHz~23.999MHz	10mA	
	24.00MHz~49.999MHz	20mA	
	50.00MHz~79.999MHz	20mA	
	80.00MHz~180.00MHz	30mA	
Frepuecy Stability	All Conditions	±30ppm	
Symmetry	AT 1/2 Vdd	45/55%	
Input Volltage	Vol(max)	0.3v	
	Voh(min)	3.0v	
Rise/Fall time	AT0.1Vdd~0.9Vdd	5ns max	
Driving Ability	CMOS load max	15PF	
	TTL load max		
Start-up Time	Load range	10ms max	
E/D Function	#1 open	#5OPEN	
	#1>=2.2v	#5OPEN	
	#1<=0.8v	#5HIGNZ	
PAD CONNECTION		PIN@1# Tri state	PIN#5OUT
		PIN#4GND	PIN#8Vdd

Add: 12F, Bldg. 3C, TianAn Cloud Park Phase 1, Bantian, Longgang, Shenzhen 518129, China

Tel: (86) 755 82507042

Fax: (86) 755 88353718

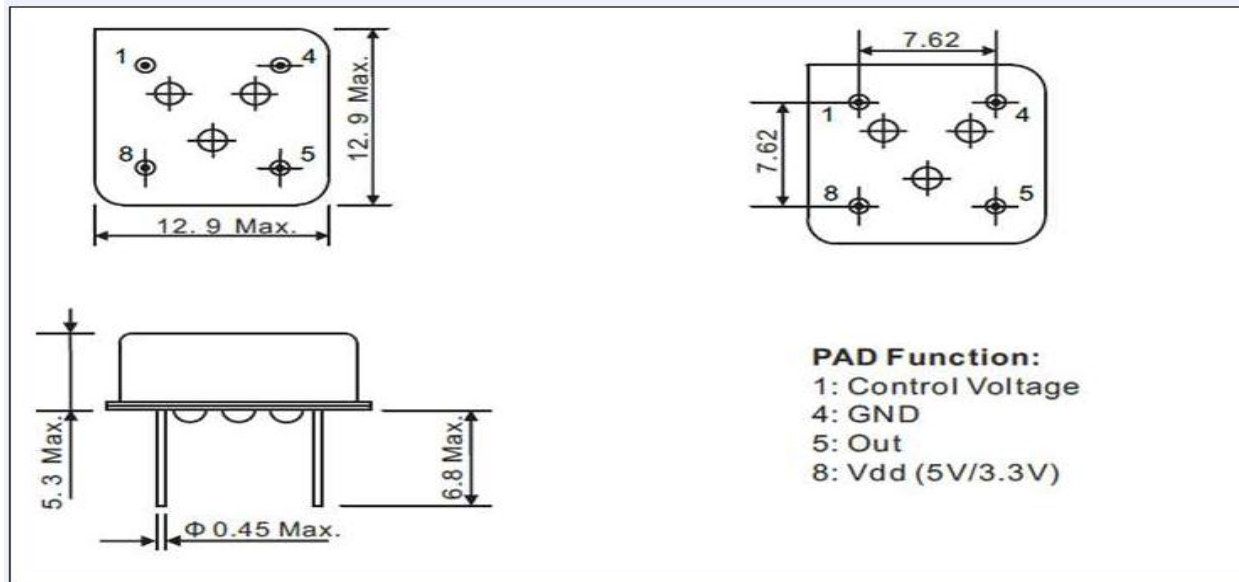
E-mail: sjk@q-crystal.com

HTTP://www.q-crystal.com.cn

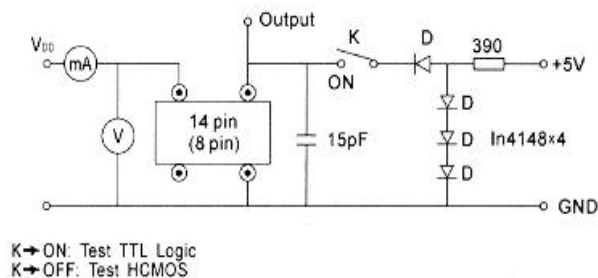
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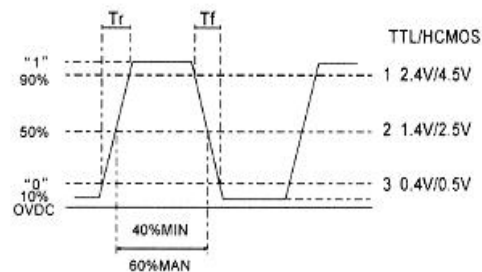
MARKING AND DIMENSIONS



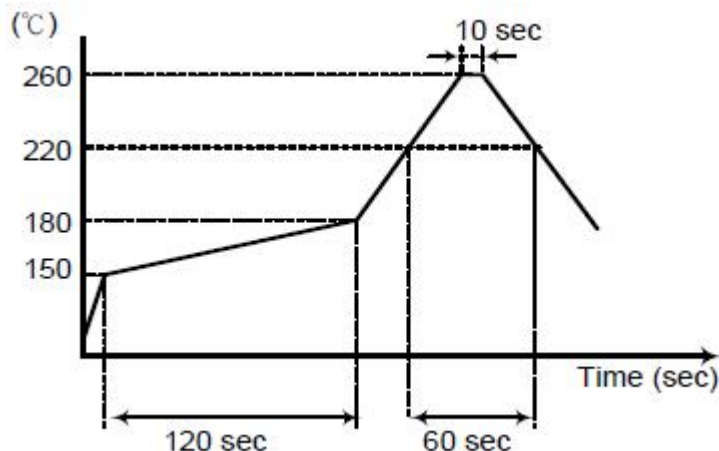
CIRCUIT PRINTCIPLE



OUTPUT WAVE FORM



REFLOW CONDITION



Total time : 200 sec. Max. Solder melting point :220 °C

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RELIABILITY TEST SPECIFICATION

Test item	Equipment	Condition	Specification
1. TERMINAL STRENGTH TEST	PULL EQUIPMENT	1. 10N force in axes of termination10±1SEC 2. 2.5MM from terminal, bend 90°	'1. MIL-STD-202F,METHOD 211A' 2. 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	HELIOT-306S	FC-84fluorocarbon,BUBBLE mavhine	MIL-STD-883C METHOD 1014.9' 1. TEST CONDITION:C1 2. TEST CONDITION:A4
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 TEST AMIL-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	HARD BOARD.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 & MIL-STD-202F
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 & HUM 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
11AGING TEST	H-PTH-80CK CHAMBER , S&A350B/250	temperature: 85℃±2, 1000hrs	JIS C5031

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