

SPECIFICATION REQUIREMENT FOR CRYSTAL

产 品 要 求

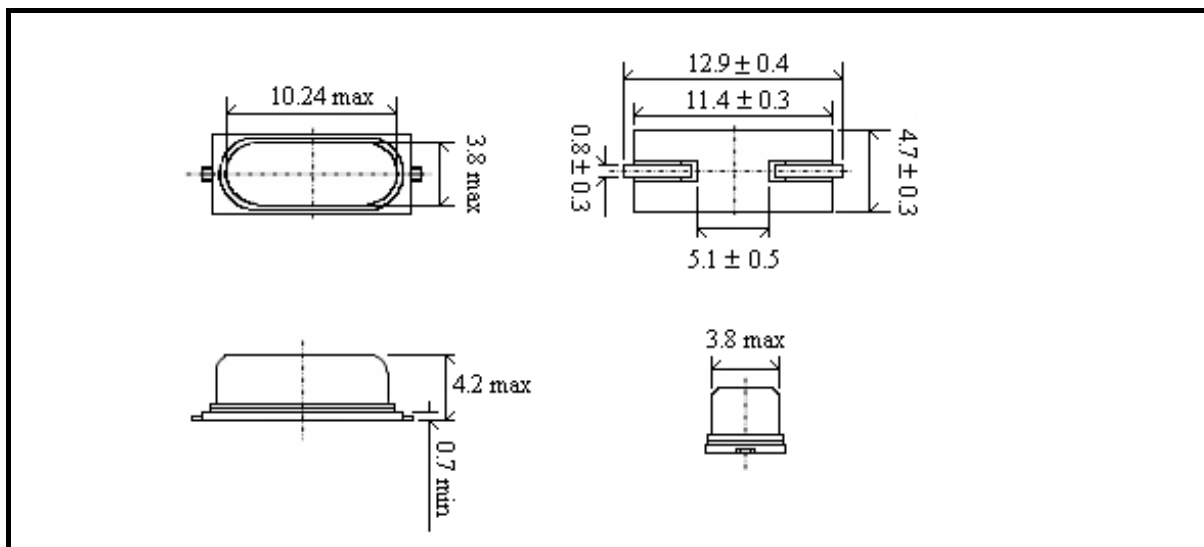
■ 电气参数 ELECTRICAL CHARACTERISTIC

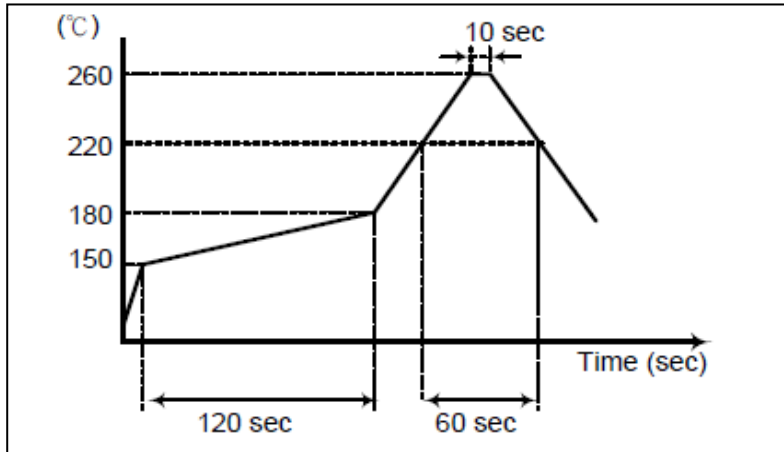
1. 型号 Model No.	HC-49SM
2. 频率 Nominal Frequency	7.3728MHz
3. 标准频差 Frequency Stability(Tol)	±20 PPM (ref at 25 °C)
4. 振动模式 Oscillation Mode	□ 基频 Fund □3rd 泛音 □5rd 泛音
5. 工作温度 Operation Temperature	- 20°C T O + 70 °C
6. 温度频差 Temperature Characteristic	±20 PPM (-20°C T O + 70 °C)
7. 负载电容 Loading Capacitance	20PF ± 0.2PF
8. 串联电阻 Series Resistance (WSR)	150Ω max
9. 激励功率 Drive Level	100μW
10. 静态电容 Shunt Capacitance	7.0 PF max
11. 老化 Aging Rate Per Year	5 PPM/ year
12. 绝缘电阻 Insulation Resistance	500M Ω min. at DC100V±10V

■ 环境情况 ENVIROMENT CHARACTERISTIC

1. 贮存温度 Storage Temperature Range	-55°C to + 125°C
2. 贮存湿度 Storage Humidity	0 — 95 %

■ 外型尺寸 DIMENSIONS



REFLOW CONDITION (回流焊)

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

RELIABILITY TEST SPECIFICATIONS (可靠性测试标准)

Test item	Equipment	Condition	Specification
1.SOLDERABILITY TEST	REL001、RC-328A	1.Solderability:235±5℃, 5±0.5S 2.Heat resistance:260±5℃,10±1S restoration of 1 hour	MIL-STD-883E Method 2003.7
2. HERMETICITY TEST	HELIOT-306S	FC-84 FLUOROCARBON,BUBBLE MACHINE	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:40℃±2, Humidity:85+3,-2%,Store 96 hrs	JIS C6701
9.AGING TEST	H-PTH-80CK CHAMBE, S&A350B/250	Temperature:40℃±2, Humidity:85+3,-2%,Store 96 hrs	JIS C5023