

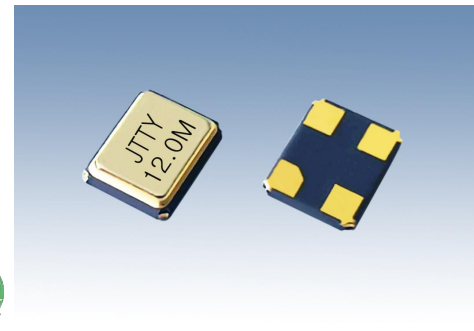
Miniature SMD Ceramic Base Crystal (3.2×2.5mm)

产品特点 FEATURES

- 为CPU提供优秀的时钟信号
Excellent Clock Signal Generator For CPUs
- 优秀的老化率
Excellent Aging
- 可选用的频率范围广泛
Wide Frequency Range Available
- 采用晶体切割技术
Cut Crystal
- 成本较低
Low Cost for Standard
- 可回流焊接
Can reflow

应用范围 APPLICATION

- 蓝牙, 移动电话
Bluetooth, Mobile phone
- 无线网络连接
Wireless LAN
- 办公自动化
Office Automation
- 视频和音频
Audio&Video
- 工业控制
Extended



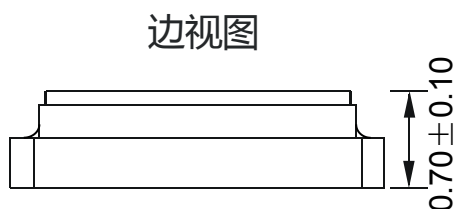
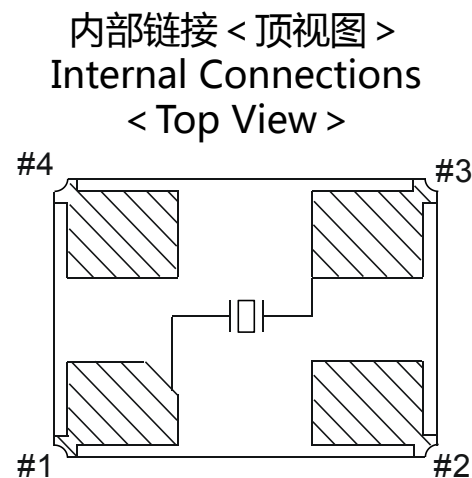
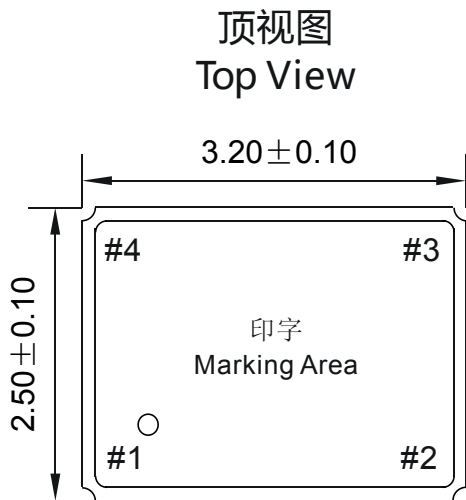
参数	Parameter	单位	条件	最小值	典型	最大值	备注	Note		
Unit	Condition	Min	Typ	Max						
频率范围	Frequency Range	MHz		8		200				
标称频率	Nominal Frequency	MHz					自定义	Custom		
频率精度	Frequency Tolerance	ppm	@25°C	±5		±50	注 1	Note 1		
频率稳定度	Frequency Stability	ppm		±5		±100	注 2	Note 2		
工作温度范围 Operating Temp. Range		°C		-20 ~ +70			标准	Standard		
				-40 ~ +85			工业控制	Extended		
				-40 ~ +125			汽车	Car		
				-55 ~ +125			汽车及军工	Car&Military		
存储温度	Storage Temp.Range	°C		-55 ~ +125						
静电容	Shunt Capacitance(C0)	pF				3.0				
谐振电阻	Equival. SeriesResistance(ESR)	Ω					见下面	As ShowBelow		
负载电容	Load Capacitance(CL)	pF	客户指定 Customer Specified	6~50 & ∞			其他可选用 OtherOptions Available			
激励功率	Drive Level	μW		10		200				
老化率	Aging Per Year	ppm	@25°C			±3.0				
绝缘电阻	Insulation Reststance	MΩ	在100V直流电 At 100VDC	500						
频率范围	Frequency Range		震动模式	Mode	最大串联谐振电阻				ESR(Ω)Max	
	8.000 ~ 12.000		基频振荡	Fundamental					200	
	12.000 ~ 20.000		基频振荡	Fundamental					70	
	20.000 ~ 40.000		基频振荡	Fundamental					40	
	40.000 ~ 200.000		基频振荡	Fundamental					50	
温度稳定性 Temperature Stability	温度范围稳定性 Stability Temp.Ranges	典型的温度特性		±5 ppm	±10 ppm	±15 ppm	±20 ppm	±25 ppm	±50 ppm	±100 ppm
		-20°C to +70°C	Y	Y	Y	Y	Y	Y	Y	Y
		-40°C to +85°C		Y	Y	Y	Y	Y	Y	Y
		-40°C to +125°C					Y	Y	Y	Y
		-55°C to +125°C					Y	Y	Y	Y
环境和机械 Environmental And Mechanical	机械冲击	Mechanical Shock	100g, 6ms,产生半正弦波脉冲, (3个方向, X,Y,Z)* 100g for 6ms,half Sinewave pulse,3 Shocks in each of 3 axes*							
	密封	Hermetic Seal	标准大气压下, 氦气泄漏速度小于 5×10 ⁻⁸ ccm/s Leak rate less than 5×10 ⁻⁸ atm. ccm/s of helium							
	焊接条件	Soldering Conditions	260°C, 最长时间为10s				260°C, for 10s max			
	温度循环	Temperature Cycle	-55°C 到 +125°C,10-100 周期.				-55°C to +125°C,10-100 Cycles.			

备注:

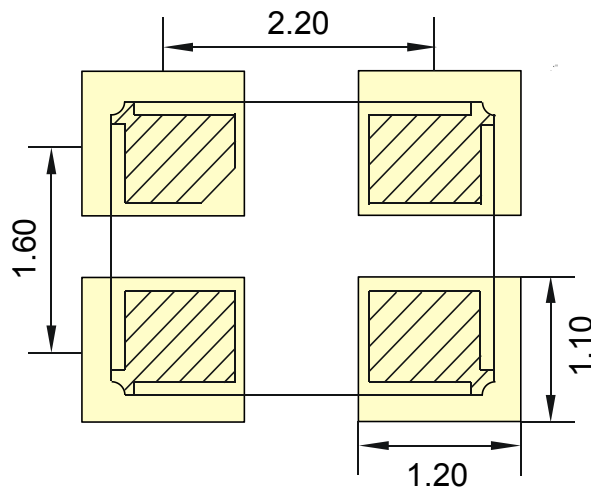
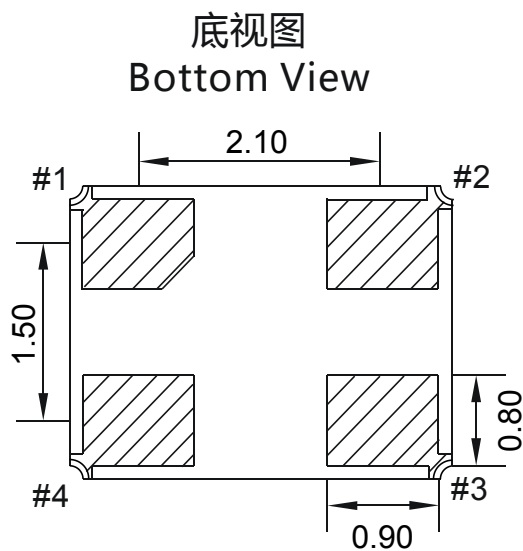
1. 可选 ±5ppm ~ ±50ppm 范围内的公差
2. 稳定性取决于温度范围,从 ±5ppm~±100ppm.
3. 所有规格如有更改, 恕不另行通知.
4. *为定制产品

Notes:

1. Available to meet ±5ppm to ±50ppm tolerances.
2. Stability depends on temp ranges, from ±5ppm to ±100ppm.
3. All specifications are subject to change without notice.
- 4.*Customized products



推荐的焊盘布局
Recommended Solder
Pad Layout



Unit:mm

所有尺寸是典型的，另有规定除外

All dimensions are typical unless otherwise specified