

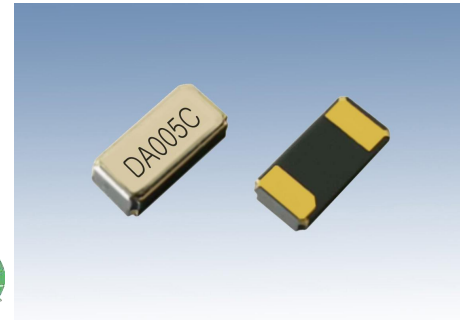
Miniature (SMD 3.2×1.5mm) Quartz Tuning Forks

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

应用范围 APPLICATION

- 电子设备 Electronic equipment
- 掌上电子产品 Pocket electronics
- 电子表 Digital watch
- 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			
电气特性 Electrical	频率范围	Frequency Range	KHz		20		310			
	标称频率	Nominal Frequency	KHz			32.768		自定义	Custom	
	频率精度	Frequency Tolerance	ppm	@25°C	±5		±20	注 1	Note 1	
	温度系数	Temp. coefficient	ppm/°C ²				-0.04	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	
							-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			1.2				
	谐振电阻	Equival. Series Resistance(ESR)	Ω				70			
	负载电容	Load Capacitance(CL)	pF	客户指定 Customer Specified		7pF、9pF、12.5pF		其他可选用 Other Options Available		
	动态电容	Motional Capacitance	fF			3.4				
	激励功率	Drive Level	μW			0.01	0.1	0.5		
老化率	Aging Per Year	ppm	@25°C				±3.0			
绝缘电阻	Insulation Resistance	MΩ	在100V直流电 At 100VDC		500					
环境和机械 Environmental And Mechanical	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:

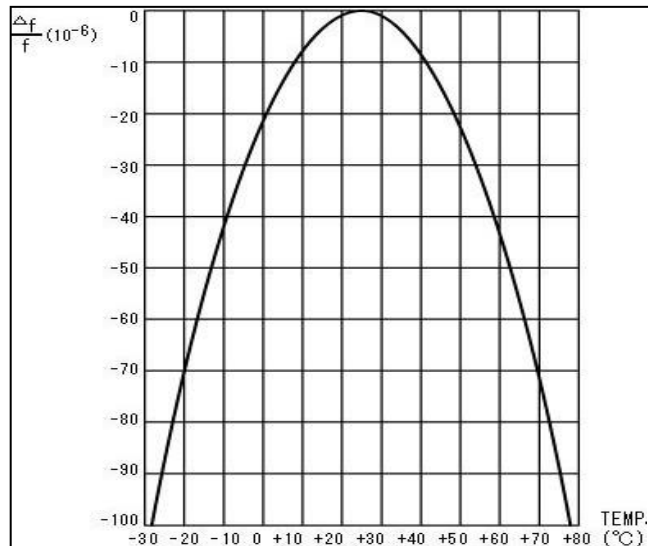
1. 可选 ±5ppm ~ ±20ppm 范围内的公差
2. 稳定性见右图.
3. 所有规格如有更改, 恕不另行通知.

Notes:

1. Available to meet ±5ppm to ±20ppm tolerances.
2. Stability see the right chart
3. All specifications are subject to change without notice.

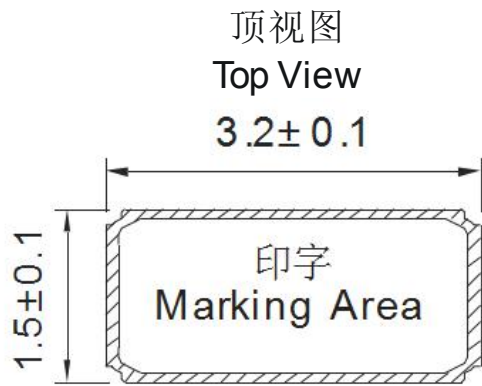
频率VS温度曲线图

Frequency VS. Temperature Curve

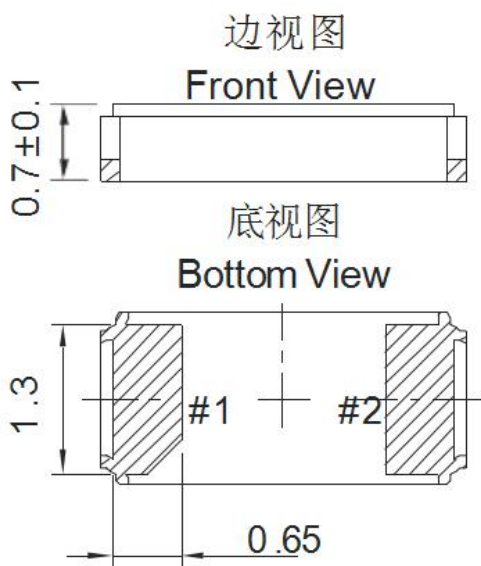
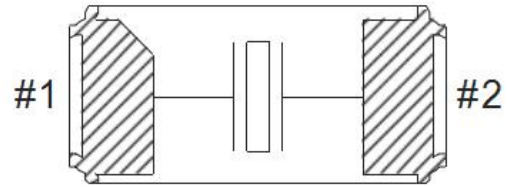


CT31M

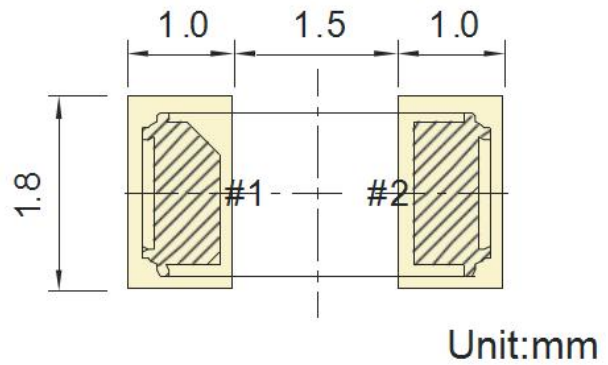
Product Data Sheet



内部连接<顶视图>
Internal Connections<Top View>



推荐的焊盘布局
Recommended
Solder Pad Layout



所有尺寸是典型的，另有规定除外

All dimensions are typical unless otherwise specified