

Crystal Resonator (晶体谐振器): KX49M4G

Feature 特征

Low aging rate for long-term frequency stability 老化率低

AT or BT cut crystal for superior thermal characteristics AT 或 BT 切割晶体

Excellent vibration and shock resistance 抗振动和抗冲击能力强

High stability and reliability for industrial applications 高稳定性与高可靠性



RoHS
Compliant
KOAN

Applications 应用

Frequency sources, time references, video systems, communication systems, measuring instruments, computers, embedded systems, functional module 频率源, 时间基准, 视频系统, 通信系统, 测量仪器, 计算机, 嵌入系统, 功能模块等

General Specifications 规格参考

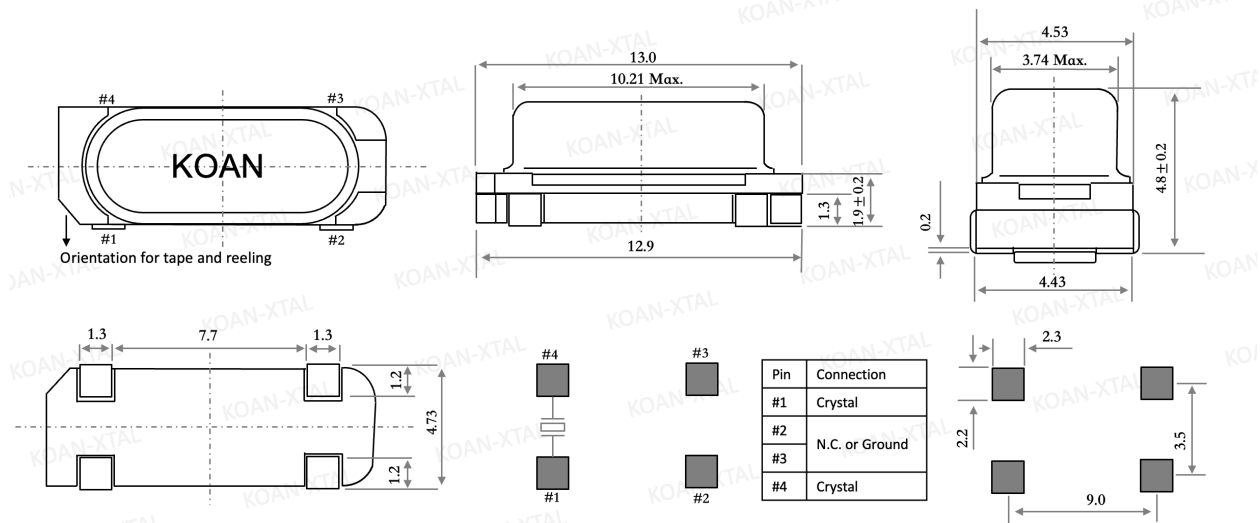
PARAMETER	性能参数	KX49M4G
Frequency Range	频率范围	3.5MHz ~ 70MHz
Oscillation Mode	振荡方式	基频/泛音
Frequency Tolerance (25°C±3°C)	调整频差	±5ppm ~ ±30ppm
Load Capacitance	负载电容	Series or Parallel (8~32pF)
Frequency Stability	温度频差	见下表
Operating Temperature Range	温度范围	见下表
Equivalent Series Resistance	谐振电阻	20Ω ~ 200Ω
Drive Level	激励电平	100μW typical, 300μW max
Shunt Capacitance	静电容	7pF max
Insulation Resistance	绝缘电阻	500MΩ min
Storage Temperature Range	储存温度范围	-55°C to +125°C
Aging Per Year	年老化率	±3ppm/year ~ ±5ppm/year

Frequency Stability 温度频差 VS Operating Temperature Range 温度范围						
Temp. Code	Temp.\ppm	±10	±20	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
D	-55~85°C			○	○	○
E	-55~105°C				○	○
F	-55~125°C					○

备注: 若有其它规格需求请告知。

KOAN[®] Product Information (产品介绍)

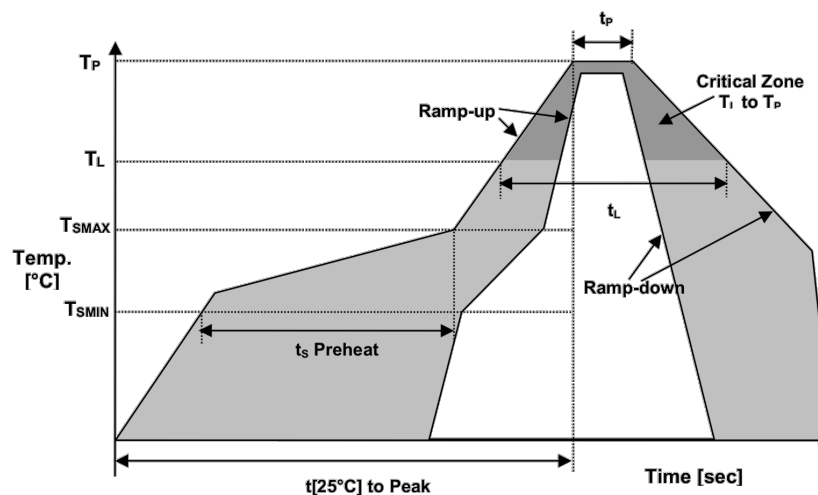
Outline Dimensions (Unit: mm) 外形尺寸



Part Number Guide 产品编号

KX49M4G	-	12.000	-	F	-	20	-	C	-	30	-	30	-	
型号	-	标称频率	-	振荡方式	-	负载	-	工作温度	-	调整频差	-	温度频差	-	特殊要求
'KX': 产品系列 '49M': 封装尺寸 MHz '4': 引脚数 'G': 引脚 2 和 3 接地或 N.C.				F-基频 T-泛音				B: -20~+70°C C: -40~+85°C D: -55~+85°C E: -55~+105°C F: -55~+125°C		05 = ±5ppm 10 = ±10ppm 15 = ±15ppm 20 = ±20ppm 30 = ±30ppm		10 = ±10ppm 20 = ±20ppm 30 = ±30ppm 50 = ±50ppm 100 = ±100ppm		NS 特殊要求

Reflow Profile 回流焊





Product Information (产品介绍)

Temperature Min Preheat	最低预热温度	T_{smin}	125°C
Temperature Max preheat	最高预热温度	T_{smax}	150°C
Time (T_{smin} to T_{smax})	时间差	t_s	30~60 sec
Temperature	温度	T_L	217°C
Peak Temperature	最高温	T_p	260 °C
Ramp-up Rate	升温速度	R_{up}	3°C/sec max
Ramp-down Rate	降温速度	R_{down}	6°C/sec max
Time within 5°C of Peak Temperature	最高温度停留时间	t_p	10 sec
Time t[25°C] to peak temperature	25度到最高温度时间	t[25°C] to peak	120 sec
Time	时间	t_L	60~150 sec

■ Revision 版本

版本 Rev.	修改页 Revise Page	修改内容 Revise Contents	日期 Date	修改人 Reviser
0	N/A	Initial issue	2025.06.23	JZ