晶体谐振器 Crystal Resonator: KX16 KX20 KX25

Feature 特征

- Ultra small package, perfectly used for space-limited designs 超小型封装，适合空间受限的设计需求
- High stability, low aging, high resistance to shock and vibration 高稳定性，老化率低，出色的抗冲击和抗震动能力

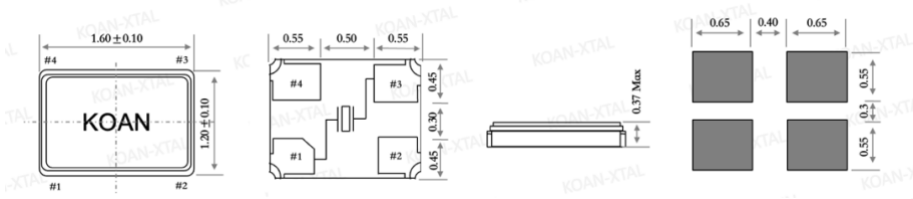
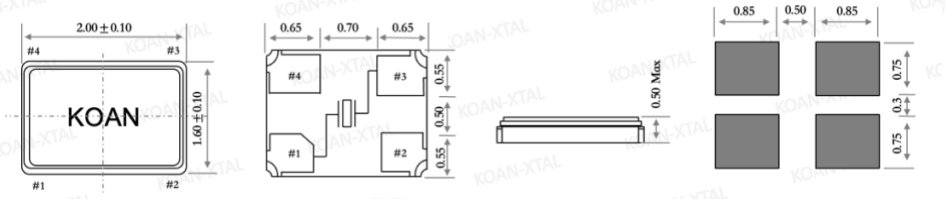
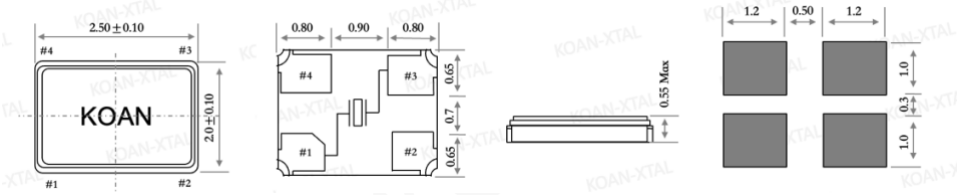
General Specifications 规格参考

PARAMETER	性能参数	KX16	KX20	KX25
Package Size	尺寸	1.6 x 1.2 mm	2.0 x 1.6 mm	2.5 x 2.0mm
Frequency Range	频率范围	24MHz ~ 54MHz	20MHz ~ 54MHz	12MHz ~ 60MHz
Oscillation Mode	振荡方式	基频/泛音		
Frequency Tolerance (25°C±3°C)	调整频差	±10ppm, ±20ppm, ±30ppm (max)		
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	120Ω max	120Ω max	20-120Ω
Drive Level	激励电平	10μW typical, 50μW max		
Shunt Capacitance	静电容	3pF max	3pF max	2pF 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 max		

Frequency Stability 温度频差 VS Operating Temperature Range 温度范围						
Temp. Code	Temp.\ppm	±20	±25	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
E	-40~105°C				○	○
F	-55~125°C				○	○

NOTE: Please consult for other specifications 若有其它规格需求请告知

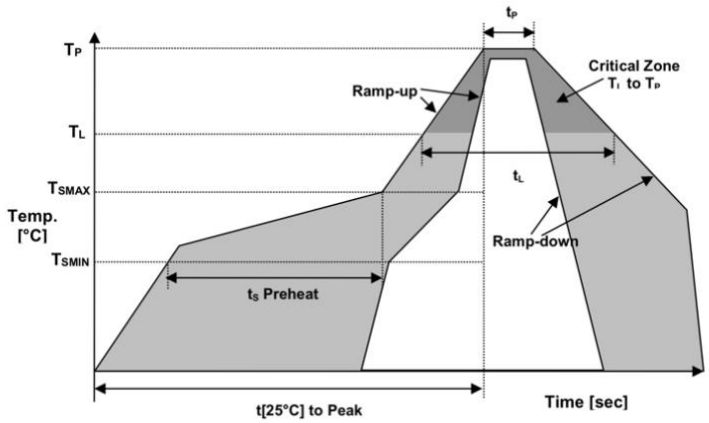
■ Outline Dimensions (Unit: mm) 外形尺寸

KX16	
KX20	
KX25	

■ Part Number Guide 产品编号

KX16	-	24.576	-	F	-	20	-	C	-	30	-	30	-	NS
↓		↓		↓		↓		↓		↓		↓		↓
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 **'16':** 封装尺寸 SMD1.6x1.2mm (MHz 频率产品 后加两位数字)		(In MHz)		F-基频 T-泛音				B: -20~+70°C C: -40~+85°C E: -40~+105°C F: -55~+125°C		10 = ±10ppm 20 = ±20ppm 30 = ±30ppm		10 = ±10ppm 20 = ±20ppm 30 = ±30ppm 50 = ±50ppm 100 = ±100ppm		

■ Reflow Profile 回流焊



Temperature Min Preheat	最低预热温度	T_{smin}	150°C
Temperature Max preheat	最高预热温度	T_{smax}	200°C
Time (T_{smin} to T_{smax})	时间差	T_s	60~120 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	30 sec
Time t[25°C] to peak temperature	25度到最高温度时间	t[25°C] to peak	480 sec
Time	时间	t_L	60~150 sec