

晶体谐振器 Crystal Resonator: KX32 KX50 KX70

Feature 特征

- Small package, perfectly used for space-limited designs 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，抗冲击和抗震动能力强



General Specifications 规格参考

PARAMETER	性能参数	KX32	KX50	KX70
Package Size	尺寸	3.2 x 2.5 mm	5.0 x 3.2 mm	7.0 x 5.0 mm
Frequency Range	频率范围	8MHz ~ 125MHz	8MHz ~ 125MHz	6MHz ~ 200MHz
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	40~500 Ω	50~100 Ω	30~150 Ω
Drive Level	激励电平	10μW typical, 50μW max	10μW typical, 100μW max	10μW typical, 100μW max
Shunt Capacitance	静电容	2pF max	3.5pF max	4pF 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

<p>KX32</p>	
<p>KX50</p>	
<p>KX70</p>	

■ Part Number Guide 产品编号

<u>KX32</u>	-	<u>24.576</u>	-	<u>F</u>	-	<u>20</u>	-	<u>C</u>	-	<u>30</u>	-	<u>30</u>	-	<u>NS</u>
↓		↓		↓		↓		↓		↓		↓		↓
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
 ‘32’: 封装尺寸
 SMD3.2x2.5mm
 (MHz 频率产品
 后加两位数字)

(In MHz)

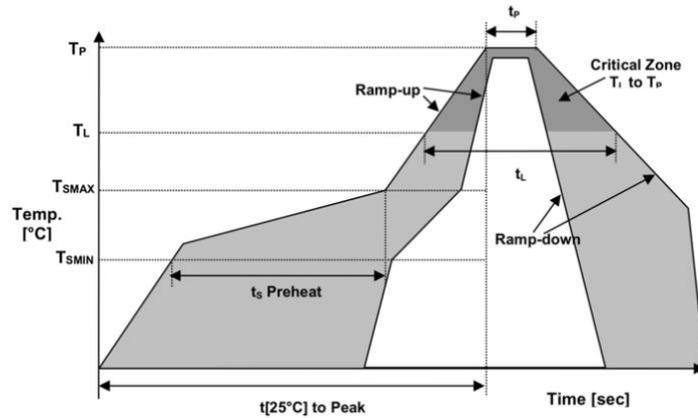
F-基频
 T-泛音

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 $t[25^\circ\text{C}]$ to peak temperature	25度到最高温度时间	$t[25^\circ\text{C}]$ to peak	480 sec
Time	时间	t_L	60~150 sec