

晶体谐振器 Crystal Resonator: KX502 KX602 KX702 KX802

■ Feature 特征

- Compact and ultra-thin profile for space-constrained devices 小尺寸，超薄设计，适用于空间受限设备
- Ceramic package ensures mechanical strength and thermal stability 陶瓷封装具有优良的机械强度和热稳定性
- Glass hermetic sealing provide excellent moisture resistance and long-term reliability 玻璃气密封装，防潮和可靠性好



■ General Specifications 规格参考

PARAMETER	性能参数	KX502	KX602	KX702	KX802
Package Size	尺寸	5.0 x 3.2 mm	6.0 x 3.5 mm	7.0 x 5.0 mm	8.0 x 4.5 mm
Frequency Range	频率范围	8~125MHz	8~40MHz	7.37~70MHz	4~70MHz
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	50~100 Ω	50~100 Ω	50~100 Ω	300 Ω Max
Drive Level	激励电平	10μW typical, 100μW max			
Shunt Capacitance	静电容	3.5pF max	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 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

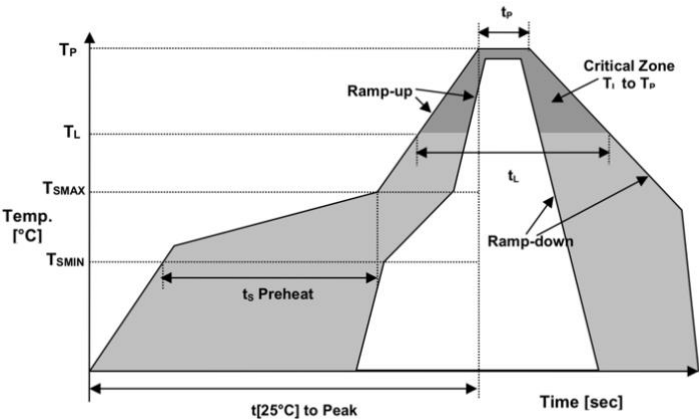
■ Outline Dimensions (Unit: mm) 外形尺寸

KX502	
KX602	
KX702	
KX802	

■ Part Number Guide 产品编号

<u>KX502</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 ‘50’: 封装尺寸 SMD5.0x3.2mm (MHz 频率产品 后加两位数字) ‘2’: 引脚数														
		(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 $t[25^{\circ}C]$ to peak temperature	25度到最高温度时间	$t[25^{\circ}C] \text{ to peak}$	480 sec
Time	时间	t_L	60~150 sec