

## 晶体谐振器 Crystal Resonator: KX49MJ

### Feature 特征

- Wide frequency range available 频率范围宽，适合多种频率应用
- Excellent shock and vibration resistance 抗冲击抗振性能优越，适合苛刻环境应用
- AT or BT cut crystal for stable frequency performance AT 或 BT 切割晶片，提供稳定的频率性能



### General Specifications 规格参考

PARAMETER	性能参数	KX49MJ
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	±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	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	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	±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

### Part Number Guide 产品编号

<u>KX49MJ</u>	-	<u>12.000</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  
'49M': 封装尺寸  
MHz  
'J': 外壳 Jacket

(In MHz)

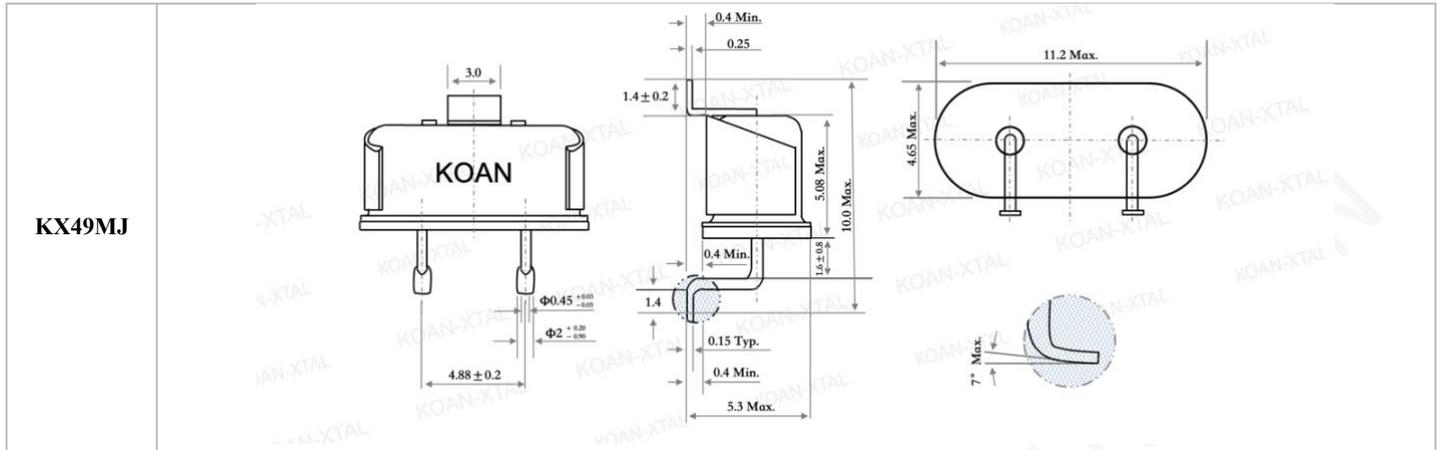
F-基频  
T-泛音

B: -20~+70°C  
C: -40~+85°C  
E: -40~+105°C  
F: -55~+125°C

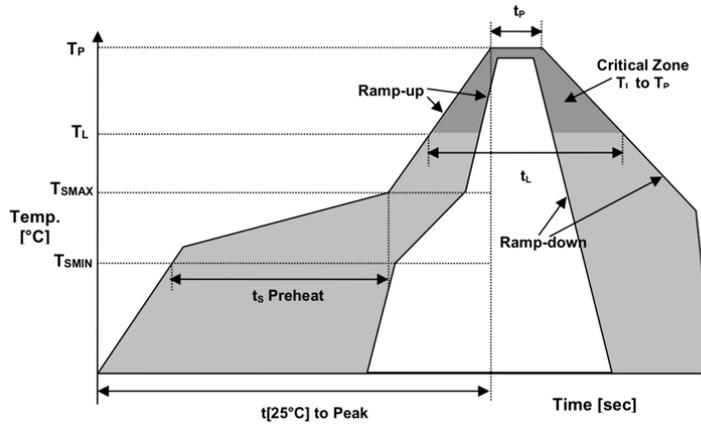
10 = ±10ppm  
20 = ±20ppm  
30 = ±30ppm

10 = ±10ppm  
20 = ±20ppm  
30 = ±30ppm  
50 = ±50ppm  
100 = ±100ppm

■ Outline Dimensions (Unit: mm) 外形尺寸



■ 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