

Temperature Compensated Crystal Oscillator (温补振荡器) - K(V)T14

Feature 特征

- KHz range KHz 频率

Applications 应用

- Time benchmarking, mobile devices, wireless communications, precision meters, intelligent monitoring, etc. 时间基准, 移动设备, 无线通讯, 精密仪表, 智能监控等



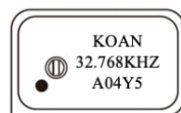
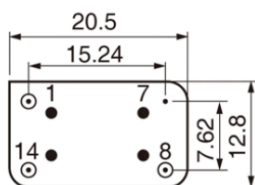
General Specifications 规格参考

PARAMETER	性能参数	TCXO: KT14, VCTCXO: KVT14
Frequency Range	频率范围	32.768KHz
Supply Voltage	工作电压	+3.3V(±10%)
Output Level High '1'	输出电平 高	0.9V _{dd} min.
Output Level Low '0'	输出电平 低	0.1V _{dd} max.
Output Logic	输出波形	CMOS
Output Load	输出负载	15pF
Initial Calibration Tolerance	调整频差	<±1ppm at +25°C with trimmer 机械调整 <±2ppm at +25°C without trimmer 电压调整
Current Consumption	工作电流	12mA max
Frequency Stability 频率温度稳定度 VS		
Aging	老化率	±1.0ppm/year max
Voltage Change	电压变化	±0.3ppm max for ±5% input voltage change
Load Change	负载变化	±0.3ppm max for ±10% load condition change
Reflow (SMD type)	回流焊 (SMD)	±1.0ppm max. 1 reflow and measured 24hs afterwards
Control Voltage Center	中心控制电压	1.5V±1.0V
Frequency Deviation Range	电压调整	±5ppm min.
Input Impedance	输入电阻	1.0MΩ min.
Modulation Bandwidth	调制宽带	3KHz min.
Linearity	非线性误差	±10% max.
Duty Cycle	占空比	45~55%
Rise & Fall Time	上升下降时间	10ns max.
Start-up Time	起振时间	2.0ms typ. 5.0ms max.
Storage Temperature Range	储存温度范围	-55°C~+125°C

Frequency Stability 温度频差 VS Operating Temperature Range 温度范围						
Temp. Code	Temp. \ppm	±0.5	±1.0	±2.0	±3.0	±5.0
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
D	-20~105°C			○	○	○
E	-40~105°C				○	○
F	-55~105°C					○
G	-20~125°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

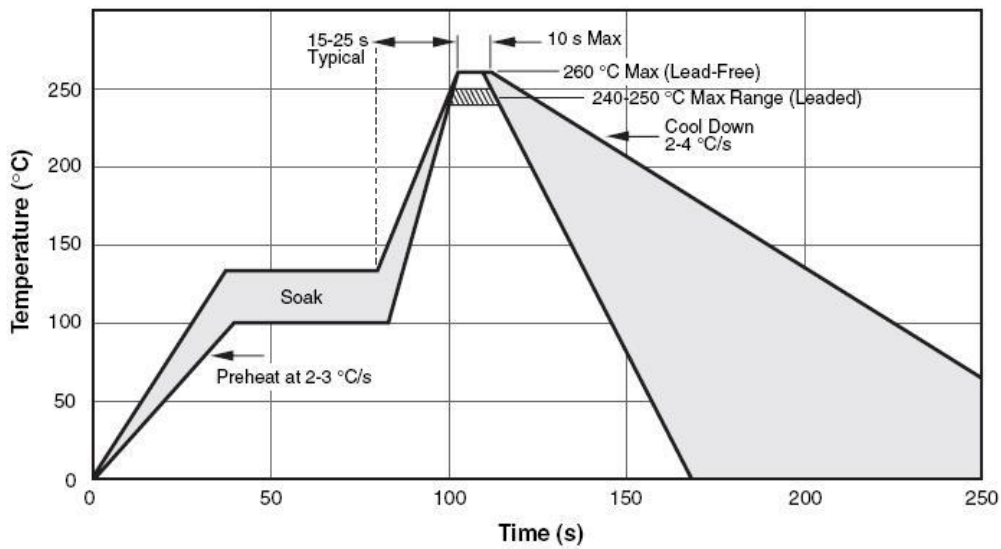


Pin	Connection
#1	Control Voltage for TCVCXO No connection for TCXO
#7	Ground
#8	Output
#14	Supply Voltage

Part Number Guide 产品编号

<u>KT14</u>	-	<u>0.032768</u>	-	<u>33</u>	-	<u>C</u>	-	<u>03</u>	-	<u>NS</u>
↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	工作电压	-	工作温度	-	温度频差	-	特殊要求
'KT': 产品系列 KT: TCXO KVT: VCTCXO '14': 封装尺寸		(In MHz)		33=3.3V		B: -20~+70°C C: -40~+85°C D: -20~+105°C E: -40~+105°C F: -55~+105°C G: -20~+125°C		A5 = ±0.5ppm 01 = ±1.0ppm 02 = ±2.0ppm 03 = ±3.0ppm 05 = ±5.0ppm		'NS':特殊要求

Wave Solder Profile 波峰焊



Average Ramp-up Rate	升温速度	~200°C/Second
Heating Rate during preheat	预热速度	1~2°C/second typical; 4°C/second max
Final Preheat Temperature Ts	最终预热温度	~130°C
Peak Temperature Tp	最高温度	260°C
Time within +0°C/-5°C of actual temperature tp	实际温度时间	10 seconds
Ramp-Down Rate	降温速度	5°C/second max