

Temperature Compensated Crystal Oscillator (温补振荡器) - K(V)T508D

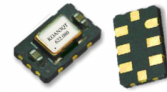
Feature 特征

- High frequency up to 2.1GHz with low jitter 超高频,低抖动

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

RoHS
Compliant
KOAN

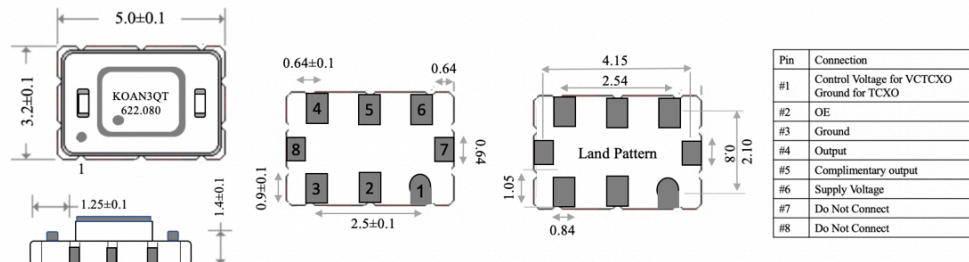


General Specifications 规格参考

PARAMETER	性能参数	TCXO: KT508D, VCTCXO: KVT508D	
Frequency Range	频率范围	10.0MHz~2.1GHz	
Supply Voltage	工作电压	+2.5V(±10%)	+3.3V(±10%)
Output Logic	输出波形	LVDS	
Output Load	输出负载	100Ω	
Initial Calibration Tolerance	调整频差	<±1ppm at +25°C	
Frequency Stability 频率温度稳定度 V.S.			
Temperature	温度	±2.5ppm over -40~+85°C	
Aging	老化率	±1.0ppm/year max	
Voltage Change	电压变化	±0.2ppm max for ±5% input voltage change	
Load Change	负载变化	±0.2ppm max for ±10% load condition change	
Reflow (SMD type)	回流焊 (SMD)	±1.0ppm max. 1 reflow and measured 24hs afterwards	
Output Level High '1'	输出电平 高	1.4V typ. 1.6V max.	
Output Level Low '0'	输出电平 低	1.1V typ. 0.9V min.	
Current Consumption	工作电流	90mA max	
Phase noise	相位噪声	0.5ps max (12KHz~20MHz)	
Rise & Fall Time	上升下降时间	0.2ns typ. 0.4ns max.	
Start-up Time	起振时间	5.0ms typ. 10ms max.	
Storage Temperature Range	储存温度范围	-55°C~+125°C	
Control Voltage Function on Pad 1			
Control Voltage Center	中心控制电压范围	+1.5V±1.0V for both Vdd=2.5V/3.3V	
Frequency Pulling Range	电压调整	±8ppm min.	
Linearity	非线性误差	±1% typ. ±10% max.	
Input Impedance	输入电阻	5MΩ typ.	

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

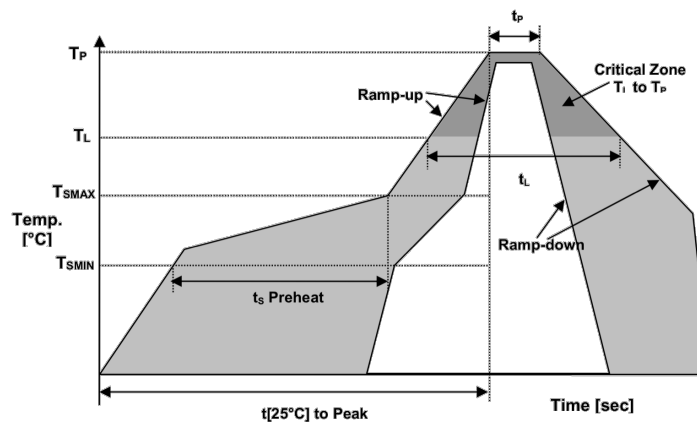
Outline Dimensions (Unit: mm) 外形尺寸



Part Number Guide 产品编号

<u>KT508D</u>	-	<u>622.080</u>	-	<u>33</u>	-	<u>C</u>	-	<u>025</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 '508':封装尺寸 SMD 5.0x3.2mm 8 pad 'D':输出波形 LVDS		(In MHz)		25=2.5V 33=3.3V		C: -40~+85°C		025 = ±2.5ppm		'NS':特殊要求

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