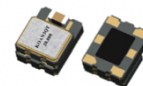


温补振荡器 Temperature Compensated Crystal Oscillator: K(V)T326 K(V)T326D

Feature 特征

- SMD packages available with CMOS and LVDS output logic 贴片封装提供 CMOS, LVDS 输出逻辑选择
- Wide frequency range up to 250MHz (CMOS) and 1.5GHz (LVDS) 频率范围宽
- VCTCXO option allows frequency tuning via control voltage 支持通过控制电压进行频率微调
- Ideal for networking, industrial control, and high speed digital systems 适用于网络通信, 工业控制, 高速数字系统



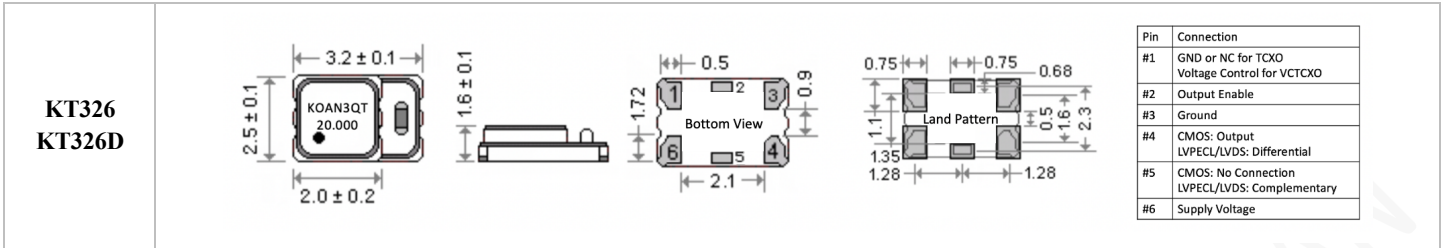
General Specifications 规格参考

PARAMETER	性能参数	K(V)T326			K(V)T326D		
Supply Voltage	工作电压	+2.5V; +3.3V					
Frequency Range	频率范围	10.0~250.0MHz			10.0~1500.0MHz		
Standard Frequency	通用频率	50, 125, 200, 156.600, 600, 800, 1000MHz					
Output Waveform	输出波形	CMOS			LVDS		
Output Load	输出负载	15pF			100Ω		
Output Logic	输出电平	High: ≥0.9Vdd Low: ≤0.1Vdd			High: 1.4V typ. 1.6V max Low: 1.1V typ. 0.9V max		
Initial Calibration Tolerance	调整频差	±1.0ppm max					
Current Consumption	工作电流	28mA typ.; 45mA max					
Frequency Stability 频率稳定性 VS							
Operating Temperature Range	温度范围	见下表					
Frequency Stability	温度频差						
Load Change	负载变化	±0.2ppm (Load±5%)					
Voltage Change	电压变化	±0.2ppm (Vcc±5%)					
Aging	老化率	±1.0ppm/year max					
Reflow	回流焊	±1.0ppm max					
Duty Cycle	占空比	45~55%					
Rise & Fall Time	上升下降时间	1.5ns typ; 3.0ns max @CMOS			0.2ns typ.; 0.4ns max@LVDS		
Phase Noise @125MHz	相位噪声 Max (dBc/Hz)	-50	-85	-100	-110	-120	
		10Hz	100Hz	1kHz	10kHz	100kHz	
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					
Control Voltage Function on Pad 1							
Control Voltage Center	中心控制电压范围	+1.5V±1.0V					
Frequency Tuning Range	频率调节范围	±8ppm min.					
Linearity	非线性误差	正向±10% max.					
Input Impedance	输入电阻	770kΩ typ.					
Harmonic	谐波抑制	-5.0dBc max					

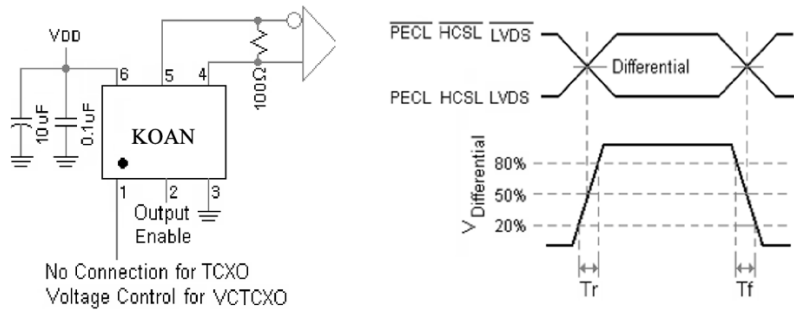
Frequency Stability 温度频差 VS Operating Temperature Range 温度范围							
Temp. Code	Temp.\ppm	± 0.5	± 1.0	± 2.0	± 2.5	± 3.0	± 5.0
A	$-10\sim 60^{\circ}\text{C}$	○	○	○	○	○	○
B	$-20\sim 70^{\circ}\text{C}$	○	○	○	○	○	○
C	$-40\sim 85^{\circ}\text{C}$		○	○	○	○	○

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



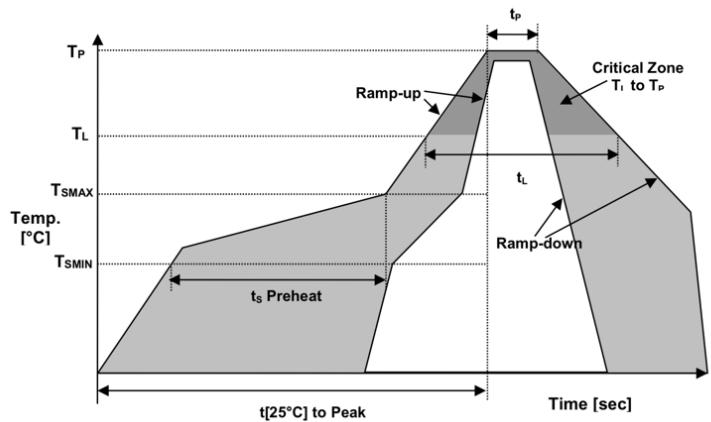
Test Circuit and Output Waveforms 测试电路图及输出波形



Part Number Guide 产品编号

<u>K(V)T326D</u>	-	<u>20.000</u>	-	<u>33</u>	-	<u>C</u>	-	<u>02</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’:温补系列 KT: TCXO KVT: VCTCXO ‘326’:封装尺寸 3.2x2.5mm 6-pad ‘D’: 输出波形 LVDS (In MHz) 25=2.5V 33=3.3V A: -10~+60°C B: -20~+70°C C: -40~+85°C A5 = ±0.5ppm 01 = ±1.0ppm 02 = ±2.0ppm 025 = ±2.5ppm 03 = ±3.0ppm 05 = ±5.0ppm ‘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