

## Temperature Compensated Crystal Oscillator (温补振荡器) - KT3225

### Feature 特征

- 1.5μA typical current consumption. 低功耗特性

### 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



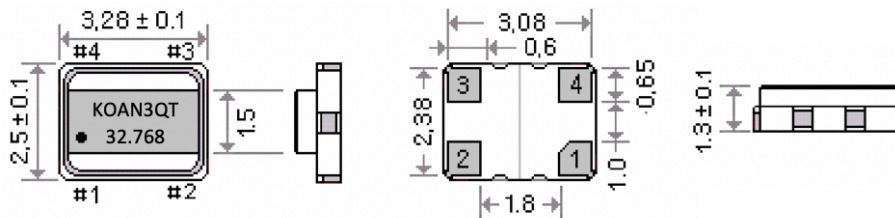
### General Specifications 规格参考

PARAMETER	性能参数	KT3225			
Frequency Range	频率范围	32.768KHz			
Supply Voltage	工作电压	+1.8V(±10%)	+2.5V(±10%)	+3.3V(±10%)	+5.0V(±10%)
Current Consumption	工作电流	0.79μA	1.05μA	1.37μA	2.05μA
Output Logic	输出波形	CMOS			
Output Load	输出负载	15pF			
Output Level High '1'	输出电平 高	V <sub>DD</sub> -0.4V min; I <sub>OH</sub> =0.1mA			
Output Level Low '0'	输出电平 低	0.4V max; I <sub>OL</sub> =-0.1mA			
Initial Calibration Tolerance	调整频差	±1.5ppm max			
<b>Frequency Stability 频率温度稳定度 VS</b>					
Temperature	温度	±5ppm over -40~+85°C			
Aging	老化率	±3.0ppm/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			
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	1s max at +25°C; 3s max over -40~+85°C			
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

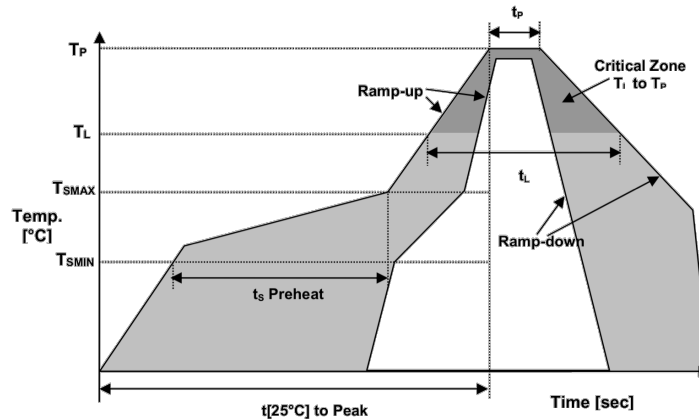


Pin	Connection
#1	Output Enable
#2	Ground
#3	Output
#4	Supply Voltage

## Part Number Guide 产品编号

<u>KT3225</u>	-	<u>0.032768</u>	-	<u>33</u>	-	<u>C</u>	-	<u>05</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 '3225':封装尺寸 SMD 3.2x2.5mm		(In MHz)		18=1.8V 25=2.5V 33=3.3V 50=5.0V		C: -40~+85°C		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