

## Clock Oscillator (时钟振荡器) - KD708D

### Feature 特征

- Programmable clock oscillators (CMOS, PECL, LVDS, CML, HCSL output logic) with short lead time 可编程输出振荡器
- High frequency up to 2.1GHz; 150fs typical phase jitter 超高频低抖动



RoHS  
Compliant  
KOAN

### Applications 应用

- Mobile communications, radar navigation, digital products, HD monitoring, precision instruments  
移动通信, 雷达导航, 数码产品, 高清监控, 精密仪器等

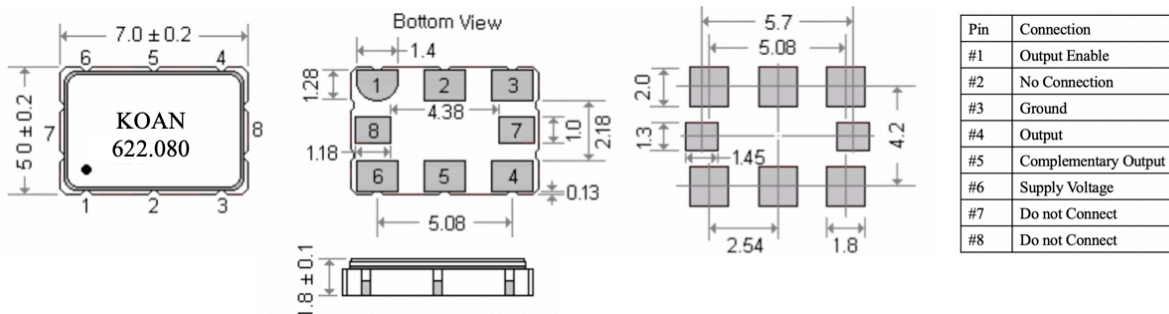
### General Specifications 规格参考

PARAMETER	性能参数	KD708D
Frequency Range	频率范围	15MHz ~ 2.1GHz
Supply Voltage	供给电压	2.5V/3.3V (±10%)
Output Logic	输出波形	LVDS
Output Load	输出负载	100Ω between output and comp. output
Frequency Tolerance	调整频差	±5ppm ~ ±30ppm
Current Consumption	工作电流	90mA max.
Output Logic High "1"	输出电平 高	1.4V typ. 1.6V max
Output Logic Low "0"	输出电平 低	1.1V typ. 0.9V min
Output Voltage Swing	输出电压波动	250mV~450mV
RMS Phase Jitter	抖动	150 fs typ. (12KHz~20MHz)
Rise & Fall Time	上升下降时间	0.4nS max
Start-up Time	起振时间	10ms max
Duty Cycle	占空比	45~55%
Aging Per Year	年化率	±3ppm~±5ppm/year
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	±10	±20	±30	±50	±100
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

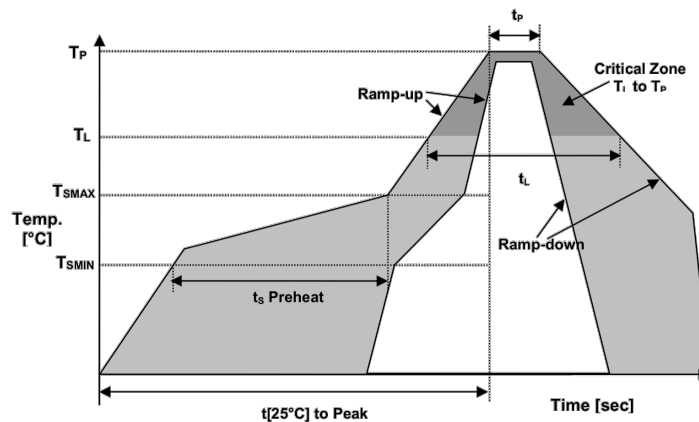
### Outline Dimensions (Unit: mm) 外形尺寸



## Part Number Guide 产品编号

<u>KD708D</u>	-	<u>622.080</u>	-	<u>33</u>	-	<u>C</u>	-	<u>30</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
'KD':产品系列 KOAN-DIFF=差分 '708':封装尺寸 SMD 7.0x5.0mm 8 pad 'D':输出波形 LVDS		(In MHz)		25=2.5V 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		10 = ±10ppm 20 = ±20ppm 30 = ±30ppm 50 = ±50ppm 100 = ±100ppm		'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