

## 时钟振荡器 Clock Oscillator: KJ326D KJ506D KJ706D

### Feature 特征

- Low current consumption 24mA typical at 622.080Mhz @ 3.3V 低功耗设计
- Wide frequency range up to 1.5GHz 频率范围宽, 最高 1.5GHz
- Ultra-low phase jitter 0.6ps RMS (12kHz to 20MHz), ensures clean, high-integrity signals 相位抖动极低, 保证信号清晰可靠
- LVDS differential output, optimized for high-speed, low-noise applications LVDS 差分输出, 适用于高速, 低噪声应用



### General Specifications 规格参考

PARAMETER	性能参数	KJ326D KJ506D KJ706D	
Frequency Range	频率范围	100MHz ~ 250MHz	150MHz ~ 1.5GHz
Supply Voltage	供给电压	+2.5V/3.3V (±10%)	
Output Logic	输出波形	LVDS	
Frequency Tolerance	调整频差	±30ppm max.	
Frequency Stability	温度频差	见下表	
Operating Temperature Range	温度范围	见下表	
Current Consumption	工作电流	68mA max.	
Output Load	输出负载	100Ω between output and comp. output	
Start-up Time	起振时间	10ms max.	
Duty Cycle	占空比	40~60%	
Rise & Fall Time	上升下降时间	0.8ns max.	
Output Enable/Disable Time	启动/禁用时间	Enable: 10ms max. Disable: 0.2μs max.	Enable: 200ns max Disable: 50ns max
Output Logic High "1" Output Logic Low "0"	输出电平 高 输出电平 低	1.4V typ. 1.6V max. 1.1V typ. 0.9V min.	
RMS Jitter(12KHz~20MHz)	抖动	50fs typ; 300fs max.	0.6ps typ.
Storage Temperature Range	储存温度范围	-55°C ~ +125°C	
Aging Per Year	老化率	±3ppm ~ ±5ppm/year	

#### Frequency Stability 温度频差 VS Operating Temperature Range 温度范围

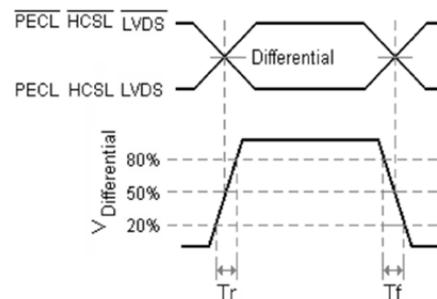
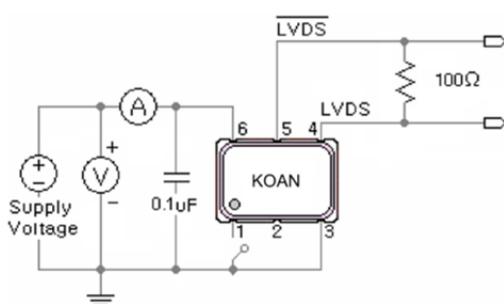
Temp. Code	Temp. \ppm	±20	±25	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
E	-40~105°C				○	○
F	-55~125°C					○

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

<p><b>KJ326D</b></p>		<p>Recommended Soldering Pattern</p>																								
<p><b>KJ506D</b></p>		<p>Recommended Soldering Pattern</p>																								
<p><b>KJ706D</b></p>		<p>Recommended Soldering Pattern</p>																								
<table border="1"> <thead> <tr> <th>Pin</th> <th>Connection</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>Output Enable (OE)</td> </tr> <tr> <td>#2</td> <td>No Connection</td> </tr> <tr> <td>#3</td> <td>Ground</td> </tr> <tr> <td>#4</td> <td>Output</td> </tr> <tr> <td>#5</td> <td>Complementary</td> </tr> <tr> <td>#6</td> <td>Supply Voltage</td> </tr> </tbody> </table>		Pin	Connection	#1	Output Enable (OE)	#2	No Connection	#3	Ground	#4	Output	#5	Complementary	#6	Supply Voltage	<table border="1"> <thead> <tr> <th colspan="2">Enable/Disable Function</th> </tr> <tr> <th>Input (#1)</th> <th>Output (#4, #5)</th> </tr> </thead> <tbody> <tr> <td>Open</td> <td>Enable</td> </tr> <tr> <td><math>V_{IH} \geq 70\%V_{DD}</math></td> <td>Enable</td> </tr> <tr> <td><math>V_{IL} \leq 30\%V_{DD}</math></td> <td>Disable</td> </tr> </tbody> </table>	Enable/Disable Function		Input (#1)	Output (#4, #5)	Open	Enable	$V_{IH} \geq 70\%V_{DD}$	Enable	$V_{IL} \leq 30\%V_{DD}$	Disable
Pin	Connection																									
#1	Output Enable (OE)																									
#2	No Connection																									
#3	Ground																									
#4	Output																									
#5	Complementary																									
#6	Supply Voltage																									
Enable/Disable Function																										
Input (#1)	Output (#4, #5)																									
Open	Enable																									
$V_{IH} \geq 70\%V_{DD}$	Enable																									
$V_{IL} \leq 30\%V_{DD}$	Disable																									

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



## Part Number Guide 产品编号

<b>KJ326D</b>	-	<b>622.080</b>	-	<b>33</b>	-	<b>C</b>	-	<b>30</b>	-	<b>NS</b>
↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	工作电压	-	工作温度	-	温度频差	-	特殊要求

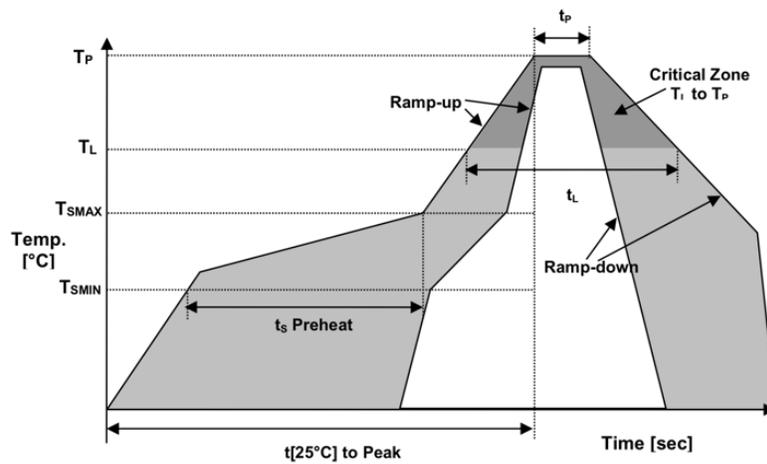
‘KJ’: 低抖动晶振  
 ‘326’: 封装尺寸  
 SMD 3.2x2.5mm 6 pad  
 ‘D’: 输出波形  
 LVDS

(In MHz)      25=2.5V      33=3.3V

B: -20~+70°C      10 = ±10ppm  
 C: -40~+85°C      20 = ±20ppm  
 E: -40~+105°C      30 = ±30ppm  
 F: -55~+125°C      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