Product Information (产品介绍)

Clock Oscillator (时钟振荡器) - KJ328D/KJ508D/KJ708D

RoHS Compliant KOAN

Feature 特征

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

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	KJ328D KJ508D KJ708D			
Frequency Range	频率范围	150MHz ~ 2.1GHz			
Supply Voltage	供给电压	+1.8V/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	75mA typ.; 90mA max			
Output Load	输出负载	100Ω between output and comp. output			
Start-up Time	起振时间	5 msec typ.; 10msec. max			
Duty Cycle	占空比	45~55%			
Rise & Fall Time	上升下降时间	0.4 nsec. max			
Output Enable/Disable Time	启动/禁用时间	Enable: 2.5 msec. max Disable: 10 usec. 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	抖动	156.250MHz 159 fsec.	491.520MHz 155 fsec.	644.530MHz 151 fsec.	2,000MHz 163 fsec.
Storage Temperature Range	储存温度范围	-55°C ~ +125°C			
Aging Per Year	年老化率	±3ppm ~ ±5ppm/year			

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	-55~85°C			○	○	○
E	-55~105°C				○	○
F	-55~125°C				○	○

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

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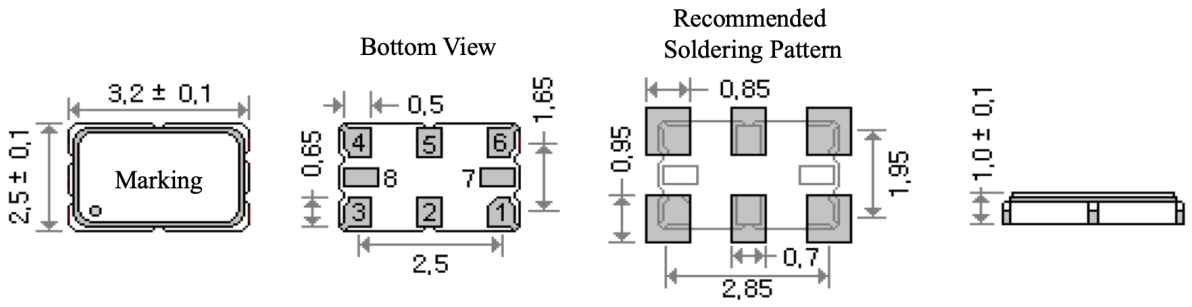
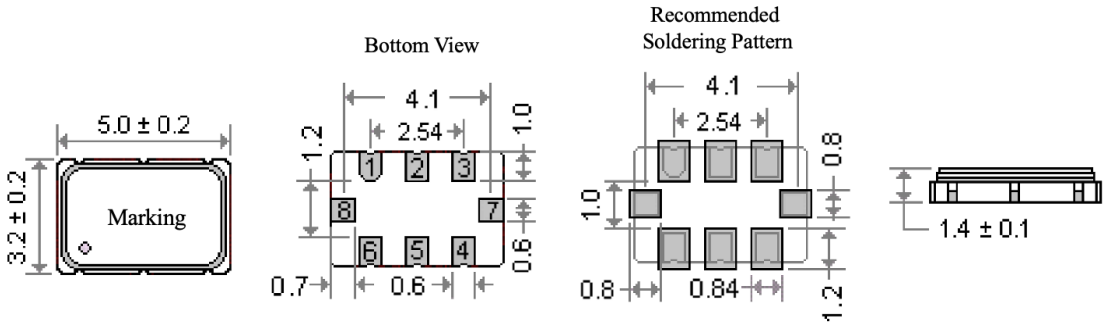
Outline Dimensions (Unit: mm) 外形尺寸

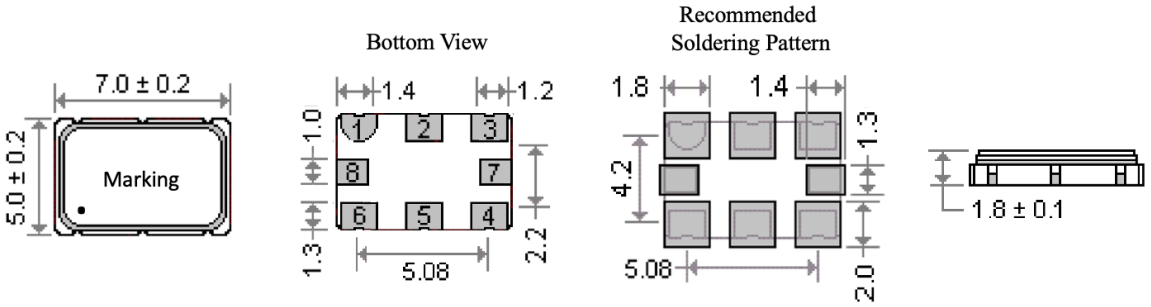
KJ328D



KJ508D



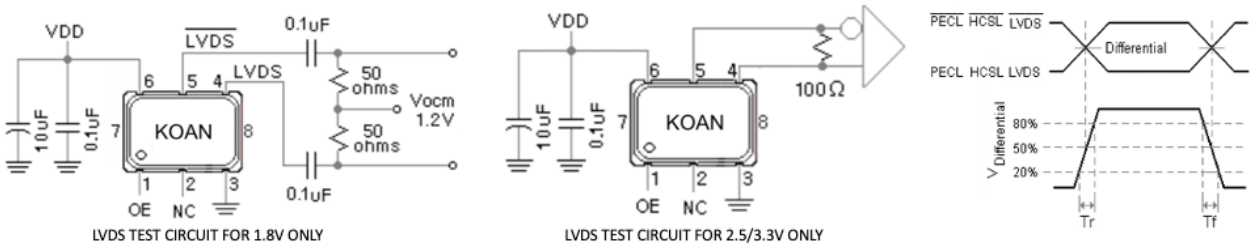
KJ708D



Pin	Connection
#1	Output Enable (OE)
#2	No Connection
#3	Ground
#4	Output
#5	Complementary
#6	Supply Voltage
#7	Do not Connect
#8	Do not Connect

Enable/Disable Function	
Input (#1)	Output (#4, #5)
Open	Enable
V_{IH} ≥80%V_{dd}	Enable
V_{IL} ≤20%V_{dd}	Disable

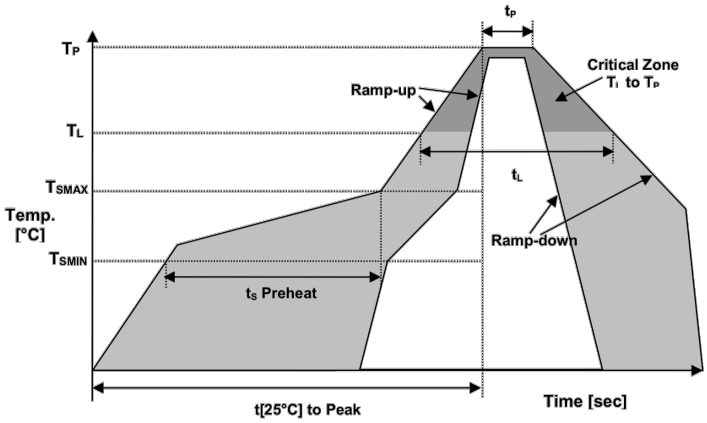
Test Circuit and Output Waveforms 测试电路图及输出波形



Part Number Guide 产品编号

KJ708D	-	622.080	-	33	-	C	-	30	-	
封装	**-**	**标称频率**	**-**	**工作电压**	**-**	**工作温度**	**-**	**温度频差**	**-**	**特殊要求**
'KJ' :产品系列 K=KOAN J=低抖动 **'708':**封装尺寸 SMD 7.0x5.0mm 8 pad **'D':**输出波形 LVDS				18=1.8V 25=2.5V 33=3.3V		B: -20~+70°C C: -40~+85°C D: -55~+85°C E: -55~+105°C F: -55~+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

Revision 版本

版本 Rev.	修改页 Revise Page	修改内容 Revise Contents	日期 Date	修改人 Reviser
1.0	2	Pin Description	2022.6.20	JZ
2.0	1	Add KJ328D	2023..26	JZ