

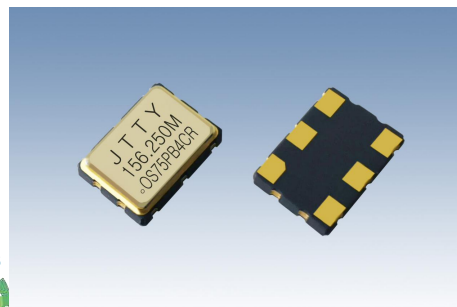
Series SMD Clock Oscillators

产品特点 FEATURES

- 典型的7.0X5.0X1.6mm 陶瓷底座贴片封装
Typical 7.0X5.0X1.6mm ceramic SMD package
- 非常低抖动 : < 1ps(典型0.6ps) RMS
Very low phase jitter : < 1ps(0.6ps , typ) RMS
- 广泛的频率范围
Wide frequency range
- 可回流焊接
Can reflow

应用范围 APPLICATION

- 高速千兆以太网, 光纤通道
High-Speed Gigabit Ethernet, Fiber Channel
- 企业服务器,SAS/SATA
Enterprise Server,SAS/SATA
- 微处理器/DSP/FPGA
Microprocessors/DSP/FPGA
- 智能电网
Smart Grid
- 存储区域网络
Storage Area Network



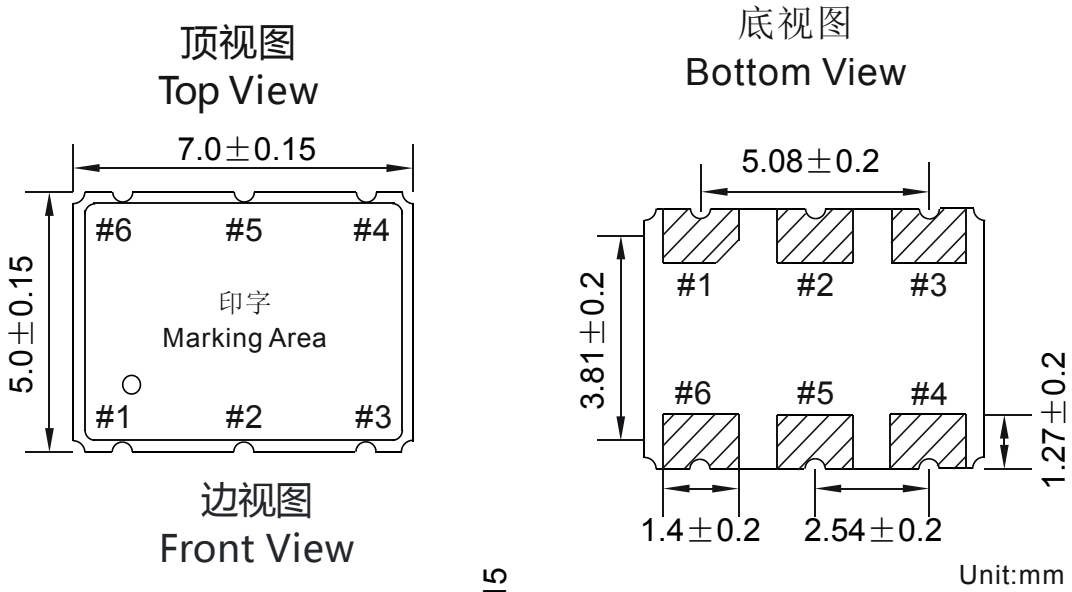
参数 Parameter	符号 Sym.	条件 Condition	最小值 Min.	典型 Typ	最大值 Max	单位 Unit	备注 Note
输入电压范围 Input Break Down Voltage	Vcc		-0.5		+6.0	V	
存储温度 Storage Temp.	Ts		-55		+125	°C	
频率范围 Frequency Range	F		10		1500	MHz	
标称频率 Nominal Frequency	Fn					MHz	自定义 Custom
频率精度 Frequency Tolerance	ΔF/F	@25°C	±5		±50	ppm	
频率稳定度 Frequency Stability	ΔF/F		±10		±100	ppm	注 1 Note 1
工作温度范围 Operating Temp. Range			-20 ~ +70		°C		标准 Standard
			-40 ~ +85				工业控制 Extended
			-55 ~ +125				汽车及军工 Car&Military
存储温度 Storage Temp.Range			-55 ~ +125		°C		
老化率 Aging Per Year		@25°C			±3.0	ppm	
工作电压 Input Voltage	Vcc		3.15 2.38	3.30 2.50	3.45 2.63	V	
消耗电流 Input Current	Icc				80	mA	注 2 Note 2
输出波形 Output Wave			LVPECL、LVDS				
负载 Load	L	50 Ω(LVPECL) ; 100Ω(LVDS)					
占空比 Duty Cycle		@50% output Swing	45		55	%	
上升/下降 时间 Rise/Fall Time	Tr/Tf				1.0	ns	注 3 Note 3
		@3.3V	@2.5V				
逻辑1输出电平 Logic 1 Level	Voh	2.275	1.475			V	LVPECL
逻辑0输出电平 Logic 0 Level	Vol	1.68	0.88				
逻辑1输出电平 Logic 1 Level	Voh	1.6	1.6			Vcc	LVDS
逻辑0输出电平 Logic 0 Level	Vol	0.9	0.9				
RM相位抖动 RMS Phase Jitter		Integrated 12KHz~20MHz At Integer Mode		0.5	1.0	ps	
相位噪声 Phase Noise		10Hz 100Hz 1KHz 10KHz			-70 -95 -125 -140	dBc/Hz	@156.25MHz
启振时间 Start-up Time	Ts			2	5	ms	
启用/禁用功能 Enable/disable Function	@3.3V	当引脚1给电压(>2.4V)时,晶振输出标称频率;当引脚1给电压(<0.4V)时,晶振停止输出;当引脚1悬空时,默认高电平,晶振正常工作 Pad #1 input High(>2.4V) or open, Pad #4 Enable: Active Pad #1 input Low (<0.4V), Pad #4 Disable:High impedance					
引脚功能 Pad Function		Pad # 1- E/D; Pad # 2- NC; Pad # 3- GND Pad # 4- Output; Pad # 5- Complementary Output; Pad # 6- Vcc					
温度循环 Tempeare Cycle		Per MIL-STD-883E, Method 1010.7, Cond. B					
机械冲击 Mechanical Shock		Per MIL-STD-883E, Method 2002.4, Cond .B					
振动 Vibration		Per MIL-STD-883E, Method 2007.3, Cond .A					
泄漏测试 Leak Testing		Per MIL-STD-883E, Method 1014					
可焊性 Solderability		Per MIL-STD-883E, Method 2003					
防潮 Moisture Resistance		Per MIL-STD-202, Method 106					

注释:

- 1: 整体稳定性以25°C为基准, 随着温度的变化频率、负载、老化率冲击和振动也将随之产生变化
 - 2: 取决于负载和频率
 - 3 上升/下降时间随频率和电源电压的变化而变化
- 所有规格如有更改, 恕不另行通知.

Notes:

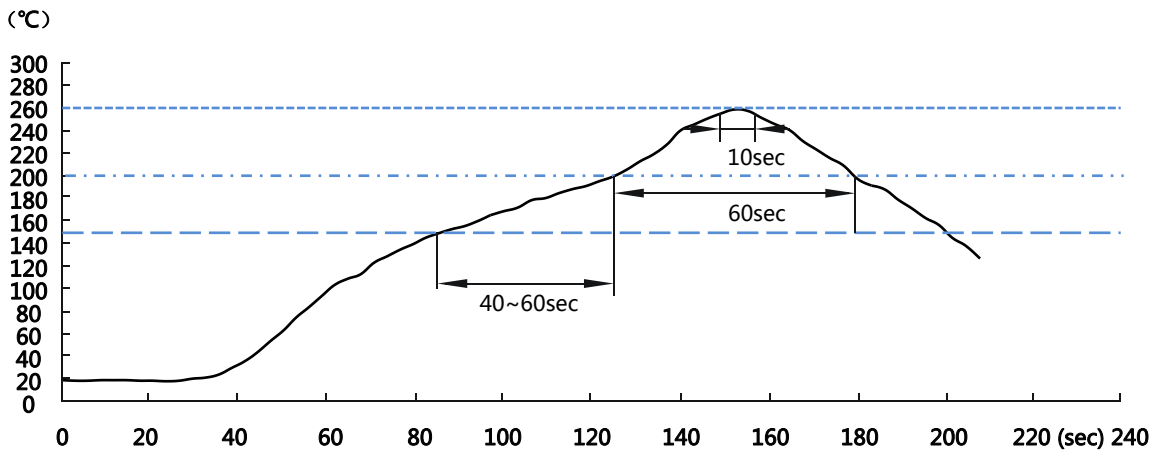
- 1: Overall stability including calibration at 25°C, operating temp. range, supply variation, load variation, aging, shock and vibration.
 - 2: Current is load and frequency dependent.
 - 3: Rise/Fall time varies with frequency and Supply voltage.
- All specifications are subject to change without notice



Pad Functions:

Pad #1	E/D
Pad #2	Tri-State/NC
Pad #3	GND
Pad #4	Output
Pad #5	Complementary Output
Pad #6	Vcc

焊机温度图
Solder Profile



预热：150°C~200°C，40~60秒
加热：200°C，60秒
峰值温度260°C±5°C，
高于255°C的时间，不超过10秒

Pre-heating: 150°C to 200°C, 40~60secs
Heating: 200°C, 60secs
Peak temperature : 260°C±5°C,
The time above 255°C, max10sec

所有尺寸是典型的，另有规定除外
All dimensions are typical unless otherwise specified