

# Programmable Crystal Oscillator YSV311PJ VCXO



## Applications

- 10 GB Ethernet,  
SONET, SATA, SAS,  
Fibre Channel

## Features

- Freq. Range: 15MHz ~ 250MHz
- Operating Voltage : 1.8V, 2.5V or 3.3V
- Package Size: 5.0\*3.2, 7.0\*5.0mm
- Ultra-low RMS Phase Jitter



## Specifications (规格参数)

Item / Type	SMD VCXO	CMOS
Output Frequency Range 额定频率范围		15MHz ~ 250MHz
Supply Voltage 电源电压		1.8V, 2.5V, 3.3V
Total Stability 频率偏差		±25ppm, ±50ppm, ±100ppm, or specify
Absolute Pull Range 牵引频率		±100ppm (min.), ±200ppm (available)
Operating Temperature Range 工作温度		-40 ~ +85°C, or specify
Storage Temperature Range 储存温度		-55 ~ +150°C
Current Consumption (VDD = + 3.3 V) 消耗电流		50MHz : 70mA (typ.) 250MHz : 80mA (typ.)
Output Load 输出负载		15pF
Duty Cycle 占空比		45 ~ 55%
Rise Time / Fall Time (20% to 80% Waveform) 上升沿/下降沿		5.0nsec (max.)
Start-up Time 启动时间		5msec (typ.) ; 10msec (max.)
Aging 老化率		±3 ppm (max.) for first year ; ±2 ppm (max.) per year thereafter
RMS Jitter [ 12 kHz ~ 20 MHz ] 相位抖动		163 fsec (typ.)

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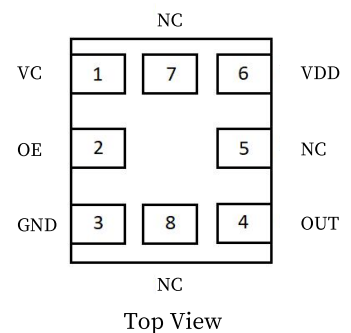


Item / Type	SMD VCXO	CMOS		
Control Voltage Function on Pin 1				
Vcontrol Center 控制电压		+ 0.9 V for VDD = + 1.8 V	+ 1.25 V for VDD = + 2.5 V	+ 1.65 V for VDD = + 3.3 V
Vcontrol Range 控制电压范围		+ 0.0V ~ +1.8V	+ 0.25V ~ +2.25V	+ 0.3V ~ +3.0V
Linearity 线性		± 1% (typ.) ; ±10% (max.)		
Transfer Function 传递函数		Positive Transfer		
Bandwidth 带宽		10KHz (typ.) Measured at -3 dB		
Output Enable Function on Pin 2				
Voltage VOH ( Min. ) / VOL ( Max. ) 输入电压		80% of VDD (min.) to enable output		
		20% of VDD (max.) to disable output		

## Pin Dimension (脚位尺寸)

Pin	#1	#2	#3	#4
FUNCTION	Voltage Control	Out Enable	Ground	Output
Pin	#5	#6	#7	#8
FUNCTION	No Connection	Supply Voltage	No Connection	No Connection

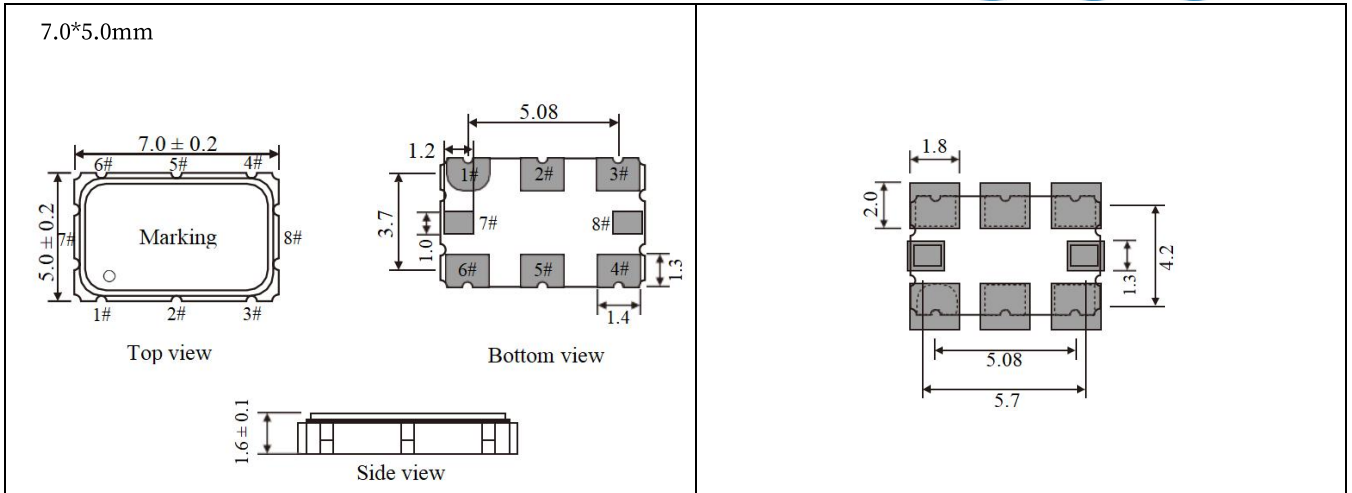
Pin Assignments



## Dimensions and Recommended Land Pattern (外观尺寸及推荐焊盘)

Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>5.0*3.2mm</p> <p>Top view</p> <p>Bottom view</p> <p>Side view</p>	

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## Test Circuit (测试电路)

