

# Programmable Differential Oscillator YSO211PJ

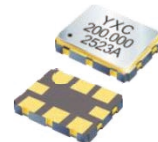


## Applications

- Networking
- Industrial

## Features

- Wide Frequency Range : 150 ~ 2100MHz
- Ultra-low RMS Jitter : 159fsec ( Typ)  
@ 3.3V , 156.250 MHz
- Low Jitter Design with New Developed IC
- Package Size: 3.2\*2.5mm, 5.0\*3.2mm,  
7.0\*5.0mm



## Specifications (规格参数)

Item/Type	LVPECL	LVDS	HCSL	CML
Output Frequency Range 额定频率范围	150MHz ~ 2100MHz	150MHz ~ 2100MHz	150MHz ~ 700MHz	150MHz ~ 2100MHz
Supply Voltage 电源电压	2.5V, 3.3V	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V
Total Stability 频率偏差	±25ppm, ±50ppm, ±100ppm or specify			
Output Load 输出负载	50Ω into VDD - 2V or Thevenin equivalent	100Ω	50Ω to GND	50Ω to VDD
Operating Temperature Range 工作温度	-40 ~ +85°C, or specify			
Storage Temperature Range 储存温度	-55 ~ +150°C			
Rise Time / Fall Time ( 20% to 80% Waveform ) 上升沿/下降沿	0.4nS Max			
Duty Cycle 占空比	45~55%			
Voltage Voh ( Min ) / Vol ( Max ) 输入电压	VOH = 90%VDD / VOL = 10%VDD			
Start-up Time 启动时间	5 msec ( Typ ) ; 10 msec ( Max )			
RMS Jitter ( Typ ) ( 12 KHz to 20 MHz ) 相位抖动	156.250MHz : 159 fsec ; 491.520MHz : 155 fsec 644.530MHz : 151 fsec ; 2, 000MHz : 163 fsec			
Current Consumption ( VDD = + 3.3 V ) 消耗电流	100mA ( Typ ) 120mA ( Max )	75mA ( Typ ) 90mA ( Max )	94mA ( Typ ) 115mA ( Max )	70mA ( Typ ) 85mA ( Max )
Disable Current 禁用电流	99mA ( Typ )	74mA ( Typ )	93mA ( Typ )	69mA ( Typ )
Output Voltage Swing 输出电压摆幅	595mV ( Min ) 930mV ( Max )	250mV ( Min ) 450mV ( Max )	450mV ( Min ) 700mV ( Typ )	200mV ( Min ) 600mV ( Typ )
Enable / Disable Time 启动/禁用时间	2.5 msec ( Max ) / 10 usec ( Max )			
Aging at Ta = +25°C 老化率	+ 3 ppm ( Max ) for first year ; ± 2 ppm ( Max ) per year thereafter			

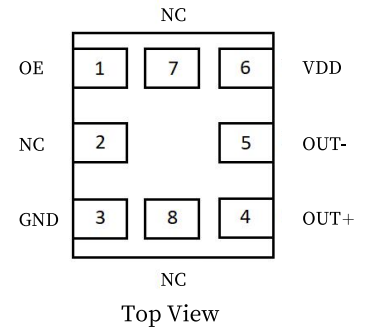
# Programmable Differential Oscillator YSO211PJ



## Pin Dimension (脚位尺寸)

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

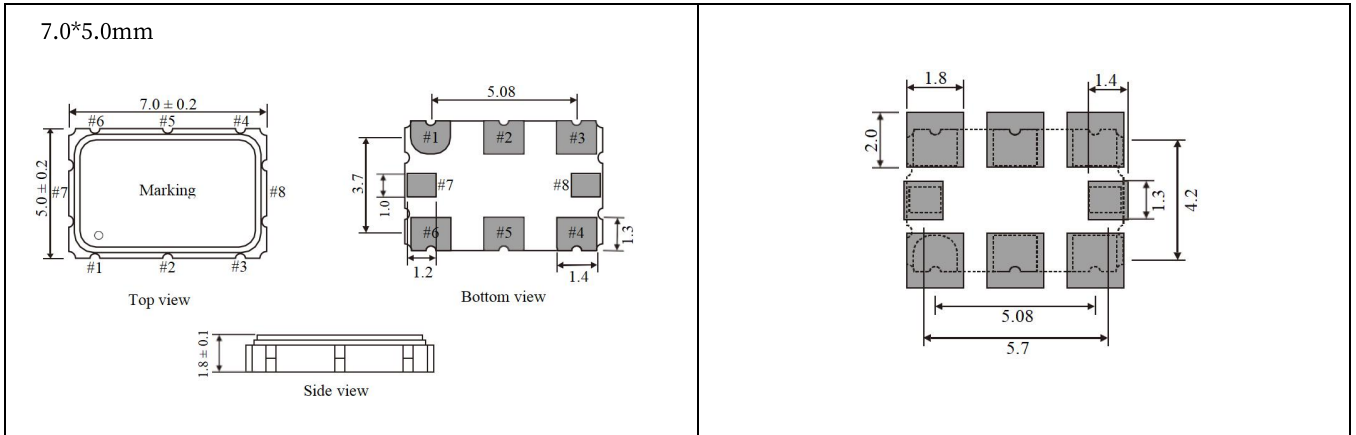
## Pin Assignments



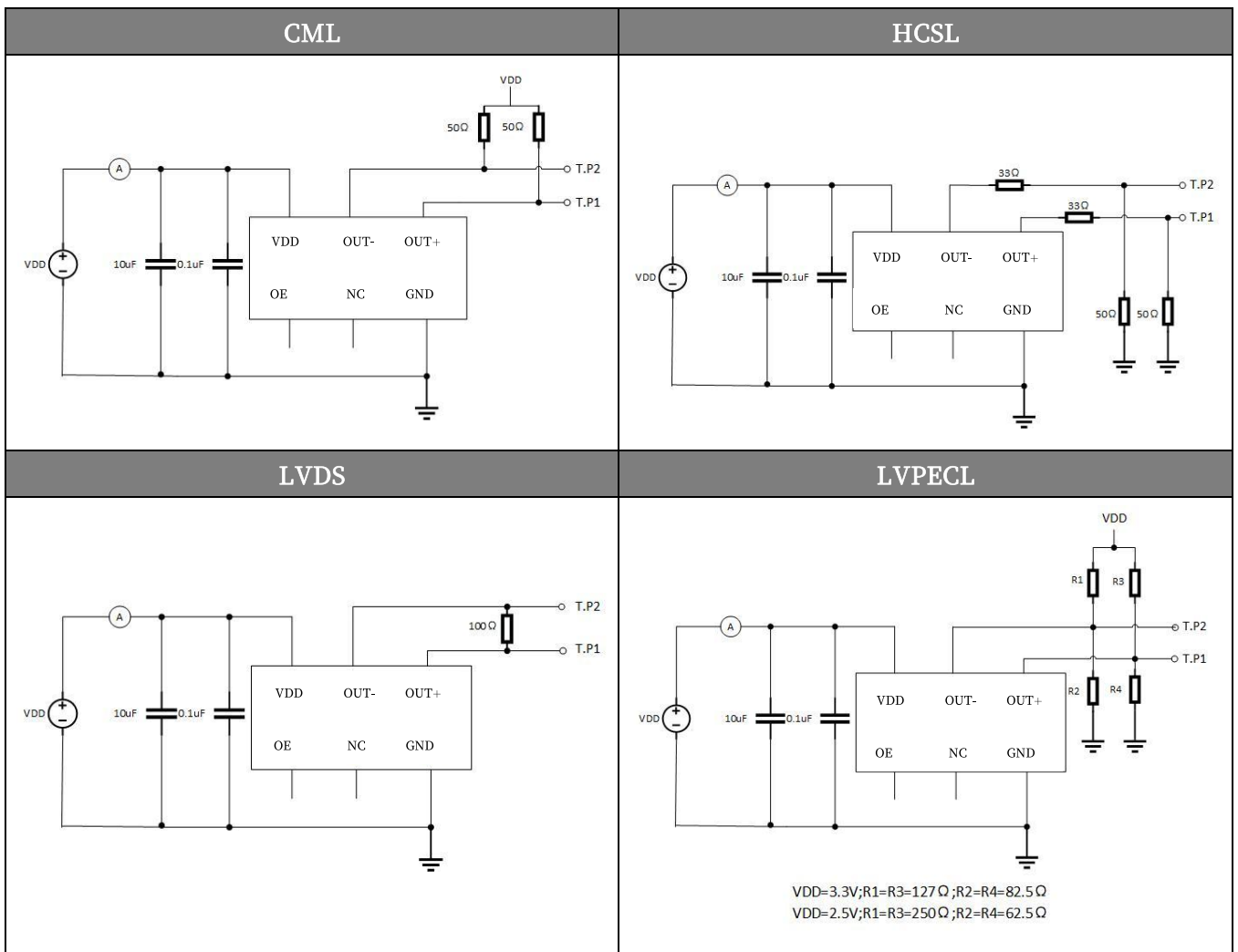
## Dimensions and Recommended Land Pattern (外观尺寸及推荐焊盘)

Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>3.2*2.5mm</p> <p>Top view</p> <p>Bottom view</p> <p>Side view</p>	
<p>5.0*3.2mm</p> <p>Top view</p> <p>Bottom view</p> <p>Side view</p>	

# Programmable Differential Oscillator YSO211PJ



## Test Circuit (测试电路)



# Programmable Differential Oscillator YSO211PJ



## LVDS Test Circuits for 1.8V only

