

Programmable Differential Oscillator YSO211PJ

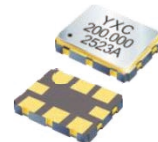


Applications

- 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			

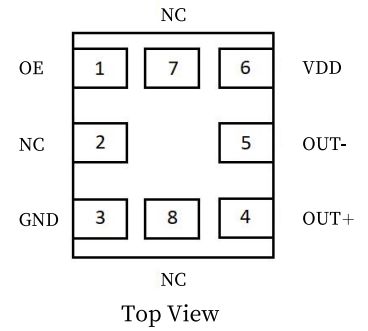
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Pin Dimension (脚位尺寸)

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

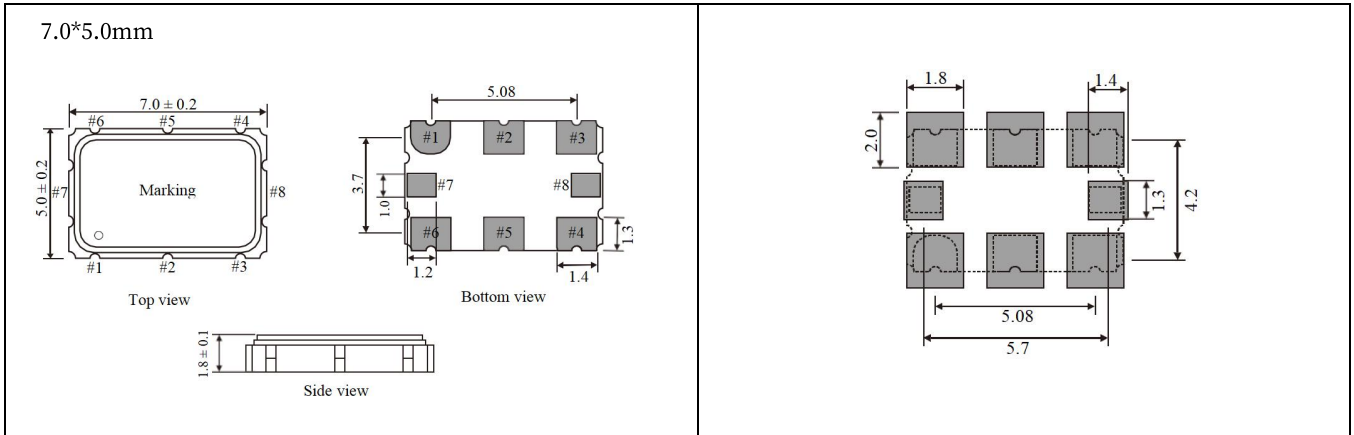
Pin Assignments



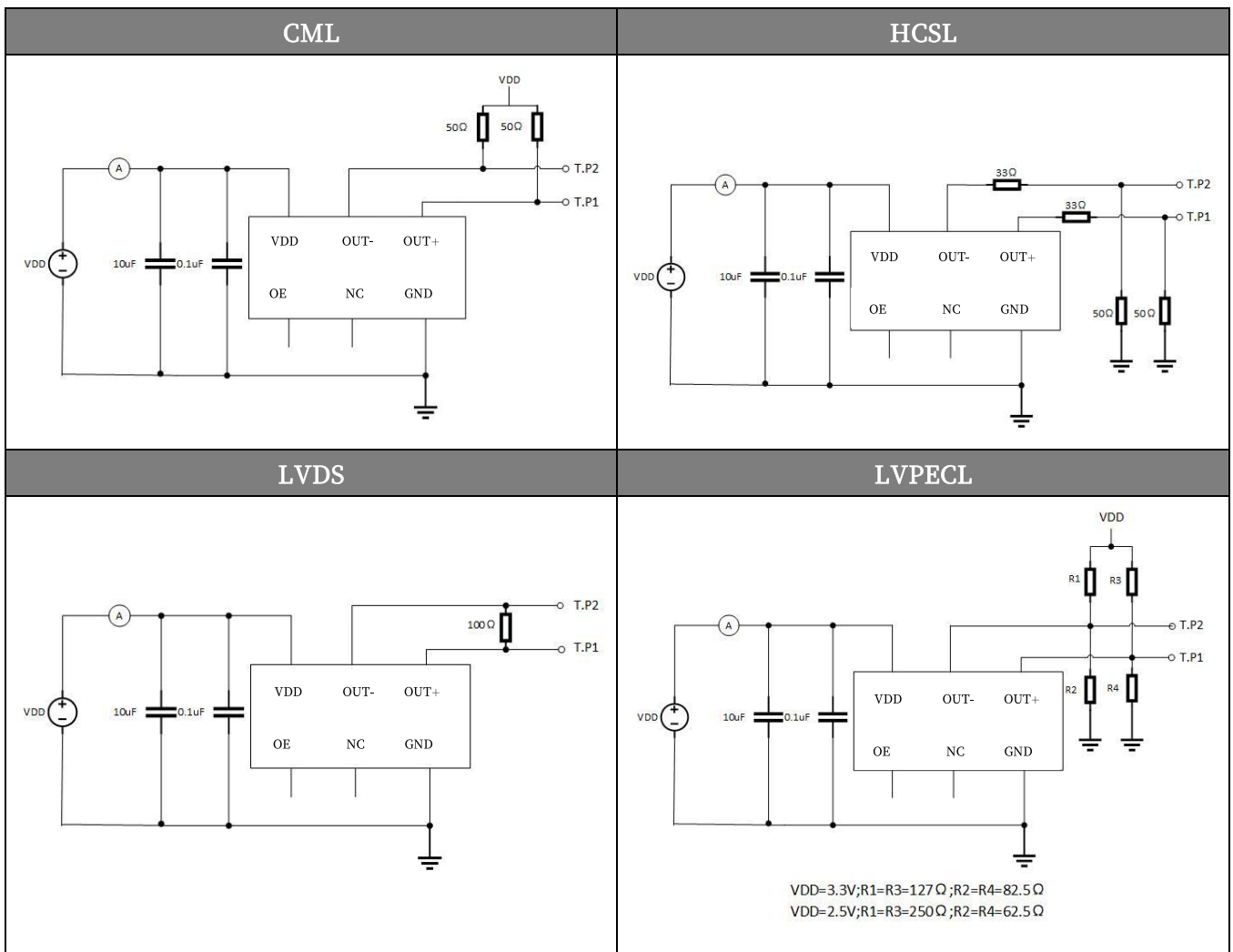
Dimensions and Recommended Land Pattern (外观尺寸及推荐焊盘)

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>	

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Test Circuit (测试电路)



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LVDS Test Circuits for 1.8V only

