

# Programmable Differential Oscillator YSO251PJ TCXO - Low Jitter



## Applications

- Networking
- Satellite Navigation
- Communications

## Features

- RMS Jitter (12KHz ~ 20MHz) :  
250 fsec typ. ( at 156.250MHz, 3.3V)

- Multiple Output: PECL, LVDS, HCSL, CML
- Package Size: 3.2\*2.5mm, 5.0\*3.2mm



## Specifications (规格参数)

Output Type	PECL	LVDS	HCSL	CML
Frequency Range 额定频率范围	15MHz ~ 2100MHz	15MHz ~ 2100MHz	15MHz ~ 700MHz	15MHz ~ 1500MHz
Supply Voltage VDD 电源电压	2.5V, 3.3V	1.8, 2.5V, 3.3V	1.8, 2.5V, 3.3V	1.8, 2.5V, 3.3V
Operating Temperature Range 工作温度	-40 ~ +85°C, or specify			
Storage Temperature Range 储存温度	-55 ~ +150°C			
Output Load 输出负载	50Ω into Vcc - 2V or Thevenin equivalent	100Ω between output and complimentary output	50Ω to GND	50Ω to VDD
Rise Time / Fall Time (Tr / Tf: 10% ↔ 90% waveform) 上升沿/下降沿	0.4 nsec ( max. )			
Duty Cycle 占空比	45~55%			
Start-up Time 启动时间	5.0msec ( typ. )			
RMS Jitter [ 12 kHz ~ 20 MHz ] 相位抖动	15 MHz ~ 50 MHz : 500 fsec ( typ. ) ; 51MHz ~ 1,200 MHz : 250 fsec ( typ. )			
Current Consumption ( max. ) ( VDD = + 3.3V ) 消耗电流	99 mA ( typ. )	74 mA ( typ. )	79 mA ( typ. )	69 mA ( typ. )
Initial Calibration Tolerance 初始校准公差	±2.0ppm ( max. ) at +25°C ±2°C ( at the shipment )			
Frequency Stability 频率稳定度	Temperature (ref to +25°C)	± 2.5 ppm over -40 °C to +85°C ( typical )		
		± 1.5 ppm over -40°C to +85°C ( available )		
	Aging at Ta = +25°C	± 1.0ppm max, per year at 25°C		
	Voltage Change	± 0.2 ppm ( max. ) , for a ± 5% input voltage change.		
	Load Change	± 0.2 ppm ( max. ) , for a ± 10% load condition change.		
	Reflow	± 1.0 ppm ( max. ) , 1 reflow and measured 24 hours afterwards.		
Output Enable / Disable Function	70% of VDD ( min. ) to enable output.			
	30% of VDD ( max. ) to disable output.			

# Programmable Differential Oscillator YSO251PJ TCXO - Low Jitter

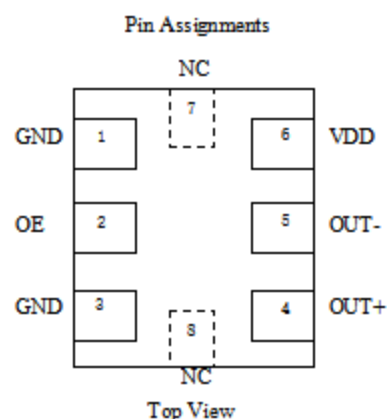


## Pin Description (脚位说明)

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

### Notes:

- Please keep the NC pin floating during use. Do not connect it to any network (power, ground, or signal).
- The provided pinout is for reference purposes only. The definitive material specification document must be obtained by contacting a sales representative.



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

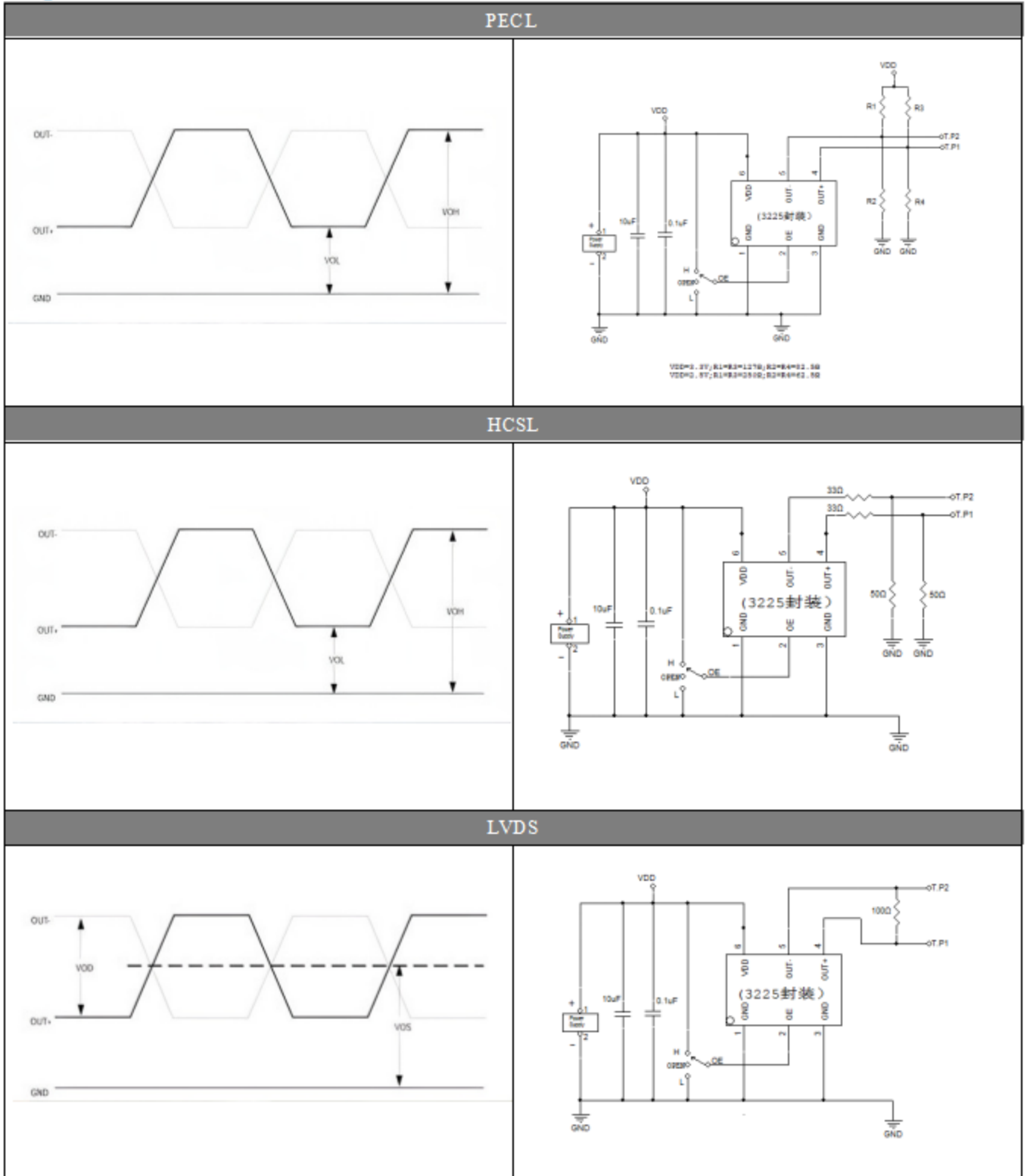
Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>3.2*2.5mm</p> <p>Top View</p> <p>Bottom View</p> <p>Side View</p> <p>Recommended soldering Pattern</p>	<p>Recommended soldering Pattern</p>
<p>5.0*3.2mm</p> <p>Top View</p> <p>Bottom View</p> <p>Side View</p> <p>Recommended soldering Pattern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

Notes:  
The package outlines are for reference purposes only. The definitive material specification document must be obtained by contacting a sales representative.

# Programmable Differential Oscillator YSO251PJ TCXO - Low Jitter



## Output Waveform and Test Circuit (输出波形和测试电路)



# Programmable Differential Oscillator YSO251PJ TCXO - Low Jitter

