

Programmable Differential Oscillator YSO250PT TCXO



Applications

- Networking
- Industrial

Features

- Low Current Consumption
(44 mA for PECL 212.500 MHz at 3.3V)
- Low Jitter Design with New Developed IC
- Package Size: 3.2*2.5mm, 7.0*5.0mm



Specifications (规格参数)

Output Type	LVPECL	LVDS
Frequency Range 额定频率范围	10MHz ~ 1500MHz	10MHz ~ 1500MHz
Supply Voltage VDD 电源电压	2.5V, 3.3V	2.5V, 3.3V
Operating Temperature Range 工作温度	-40 ~ +85°C, or specify	-40 ~ +85°C, or specify
Storage Temperature Range 储存温度	-55 ~ +150°C	-55 ~ +150°C
Output Load 输出负载	50Ω into Vcc - 2V or Thevenin equivalent	100Ω
Rise Time / Fall Time (Tr / Tf : 10% ↔ 90% waveform) 上升沿/下降沿	0.2nsec (typ.) 0.5 nsec (max.)	0.2nsec (typ.) 0.4nsec (max.)
Duty Cycle 占空比	45~55%	45~55%
Start-up Time 启动时间	5.0msec (max.)	5.0msec (max.)
RMS Jitter [12 kHz ~ 20 MHz] 相位抖动	1.5psec (typ.)	1.5psec (typ.)
Current Consumption (max.) (VDD = +2.5V) 消耗电流	50MHz : 46mA	50MHz : 32mA
	125MHz : 50mA	125MHz : 40mA
	200MHz : 60mA	200MHz : 44mA
Current Consumption (max.) (VDD = +3.3V) 消耗电流	50MHz : 50mA	50MHz : 35mA
	125MHz : 55mA	125MHz : 40mA
	200MHz : 62mA	200MHz : 44mA
Current with Output Disabled 禁用电流	18mA (typ.)	18mA (typ.)
Initial Calibration Tolerance 初始校准公差	±2.0ppm (max.) at +25°C±2°C (at the shipment)	
Frequency Stability 频率偏差	Temperature (ref to +25°C)	± 2.5ppm over -30°C to +85°C (default)
		± 1.0ppm over -40°C to +85°C (available)
	Aging at Ta = +25°C	± 2.0ppm max, first year at 25°C
Frequency Stability 频率偏差	Voltage Change	± 0.2ppm max, for a ±5% input voltage change
	Load Change	± 0.2ppm max, for a ±10% load condition change
	Reflow	± 1.0ppm max, 1 reflow and measured 24 hours afterwards
Output Enable Function on Pin 1		
Voltage VOH (Min.) / VOL (Max.) 输入电压	70% of VDD (min.) to enable output (Open connection prohibit.)	
	30% of VDD (max.) to disable output	

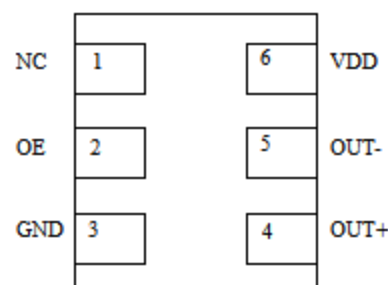
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Pin Description (脚位说明)

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

Pin Assignments



Top View

Notes:

1. Please keep the NC pin floating during use. Do not connect it to any network (power, ground, or signal).
2. 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*2.5 mm</p> <p>Top View</p> <p>Bottom View</p> <p>Side View</p>	<p>Recommended soldering Pattern</p>
<p>7.0*5.0 mm</p> <p>Top View</p> <p>Bottom View</p> <p>Side View</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.

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

