

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	PECL	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	20MHz : 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

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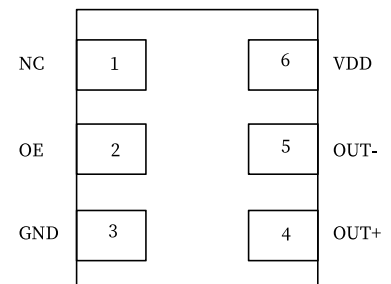


Output Type	PECL	LVDS
Frequency Stability 频率偏差	Voltage Change	$\pm 0.2\text{ppm}$ max, for a $\pm 5\%$ input voltage change
	Load Change	$\pm 0.2\text{ppm}$ max, for a $\pm 10\%$ load condition change
	Reflow	$\pm 1.0\text{ppm}$ max, 1 reflow and measured 24 hours afterwards
Output Enable Function on 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	

Pin Dimension (脚位尺寸)

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

Pin Assignments

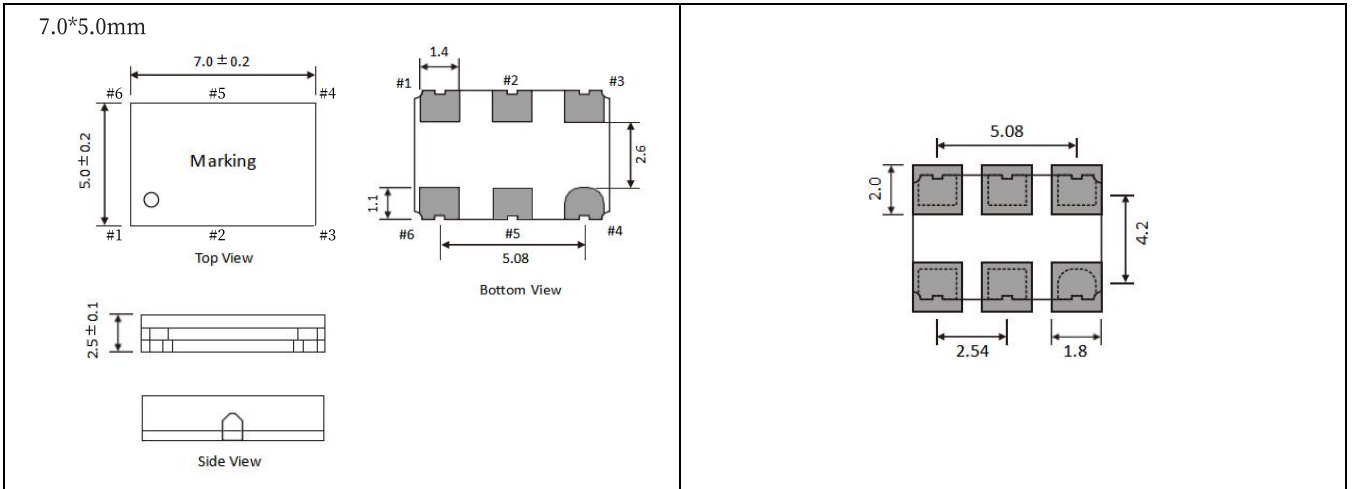


Top View

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>	

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Test Circuit (测试电路)

