

Programmable Voltage Control Temperature Compensated YSV531PT VC-TCXO



Applications

- Networking
- Industrial

Features

- An Integrated Phase Jitter Performance of 1.0 pS RMS Min
- Low Jitter Design with New Developed IC
- Package Size: 3.2*2.5mm, 7.0*5.0mm

Specifications (规格参数)

Output Type	CMOS	
Frequency Range 额定频率范围	10MHz ~ 250MHz	
Supply Voltage VDD 电源电压	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	15 pF	
Rise Time / Fall Time (Tr / Tf: 10% ↔ 90% waveform) 上升沿/下降沿	1.5 nsec (typ.) 3.0 nsec (max.)	
Duty Cycle 占空比	45~55%	
Start-up Time 启动时间	5.0 msec (max.)	
RMS Jitter [12 kHz ~ 20 MHz] 相位抖动	1.5 psec (typ.)	
Current Consumption (max.) (VDD = +2.5V) 消耗电流	50MHz : 34mA 125MHz : 38mA 200MHz : 40mA	
Current Consumption (max.) (VDD = +3.3V) 消耗电流	50MHz : 36mA 125MHz : 40mA 200MHz : 44mA	
Current with Output Disabled 禁用电流	18mA (typ.)	
Initial Calibration Tolerance 初始校准公差	±2.0 ppm (max.) at +25°C ±2°C (at the shipment)	
Frequency Stability 频率偏差	Temperature (ref to +25°C)	±2.5 ppm over -30°C to +85°C (default) ±1.0 ppm over -40°C to +85°C (available)
	Aging at Ta = +25°C	±2.0 ppm max, first 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
Control Voltage Function on Pin 1		
Control Voltage Center and Range 控制电压	+1.5V ± 1.0V for both VDD = 2.5V and 3.3V	
Frequency Pulling Range 牵引频率	±8 ppm (min.)	
Linearity 线性	±1% (typ.) ±10% (max.)	
Transfer Function 传递函数	Positive Transfer	
Absolute Voltage 绝对电压	4.0 V (max.)	
Input Impedance 输入阻抗	770 KΩ (typ.)	

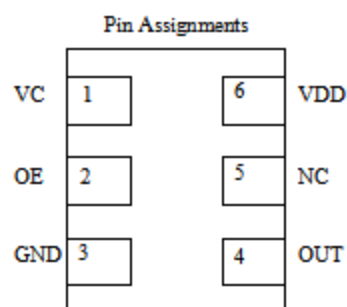
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Output Enable Function on Pin 2	
Voltage VOH (Min.) / VOL (Max.) 输入电压	70% of VDD (min.) to enable output (Open connection prohibit.)
	30% of VDD (max.) to disable output

Pin Description (脚位说明)

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



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*2.5mm</p> <p>Top View</p> <p>Bottom View</p> <p>Side View</p>	<p>Recommended soldering Pattern</p>
<p>7.0*5.0mm</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)

