Temperature Compensated Voltage Control

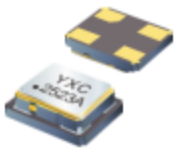
YSV350TP VC-TCXO

Applications

- Mobile Communications

Features

- Wide Frequency Range: 6.4 ~ 60.0 MHz
- Frequency Stability as Tight as ± 0.5ppm Over 0°C to 50°C
- Frequency Stability as Tight as ± 1.0ppm Over -40°C to 85°C



Specifications（规格参数）

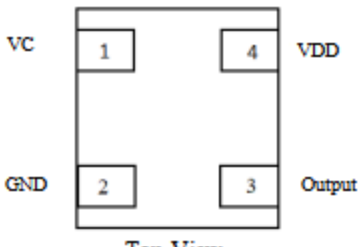
Item / Type			CMOS				Clipped Sine Wave
Frequency Range 额定频率范围			6.4MHz ~ 60MHz				10MHz ~ 52MHz
Operating Temperature Range 工作温度			-30~+85°C, or specify				
Storage Temperature Range 储存温度			-55°C to +125°C				
Frequency Stability vs Temperature			± 0.5ppm, ± 1.0ppm, ± 1.5ppm, ± 2.0ppm, ± 2.5ppm, ± 3.0ppm				
Supply Voltage 电源电压			1.8V, 2.5V, 2.8V, 3.0V, 3.3V				
Initial Calibration Tolerance 初始校准公差			Models with mechanical trimmer : < ± 1.0ppm. +25°C ± 2°C				
Output Load 输出负载			15 pF				10 KΩ // 10 pF
Duty Cycle 占空比			Standard: 50 % ± 10 % ; Option: 50 % ± 5 %				
Electrical Frequency Tuning (EFC) by External Control Voltage 电频调谐	Control Voltage Center		0.9 V ± 0.6 V(1.8 V); 1.4 V ± 1.0 V(2.5V); 1.5 V ± 1.0 V(3.0V / 3.3V)				
	Frequency Deviation Range		± 5.0ppm (min.)				
	Slope Polarity (Transfer Function)		Positive slope. Positive voltage for positive frequency shift				
			Input Impedance : 1.0MΩ (min.)	Modulation Bandwidth : 20KHz (min.)		Linearity : ± 10 % (max.)	
Frequency Stability 频率偏差	vs Aging at Ta = +25°C		± 1.0ppm / year (max.)				
	vs Voltage Change		± 0.3ppm (max.), for a ±5% input voltage change				
	vs Load Change		± 0.3ppm (max.), for a ±10% load condition change				
	vs Reflow (SMD type)		± 1.0ppm (max.), 1 reflow and measured 24 hours afterwards				
Phase Noise [dBc / Hz(typ.)] 相位噪声	Offset	10 Hz	100 Hz	1 KHz	10 KHz	100 KHz	Remarks
	10.0MHz	-96 dBc / Hz	-122 dBc / Hz	-138 dBc / Hz	-145 dBc / Hz	-150 dBc / Hz	Type: CMOS
	13.0MHz	-80 dBc / Hz	-115 dBc / Hz	-135 dBc / Hz	-148 dBc / Hz	-148 dBc / Hz	Type: Clipped Sine Wave

Pin Description（脚位说明）

Pin	#1	#2	#3	#4
FUNCTION	Voltage Control	Ground	Output	Supply Voltage

Notes:The provided pinout is for reference purposes only. The definitive material specification document must be obtained by contacting a sales representative.

Pin Assignments



Top View

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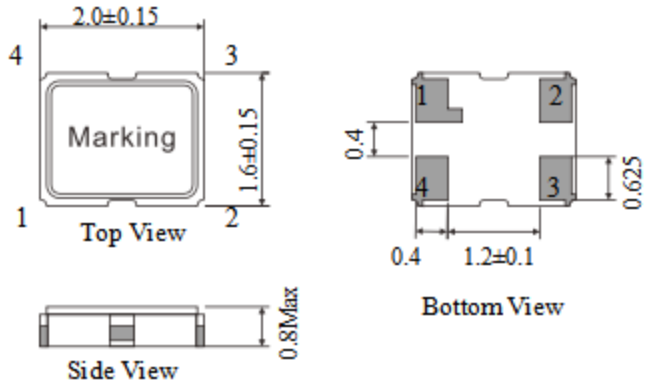
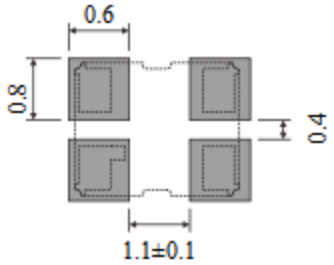
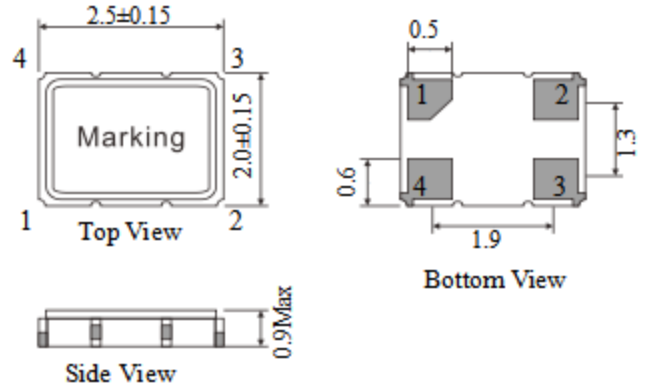
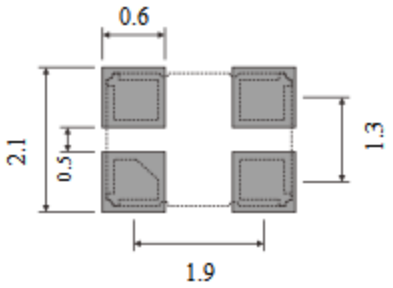
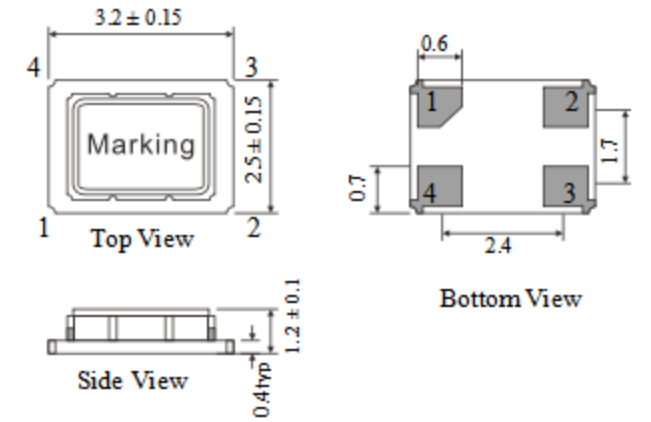
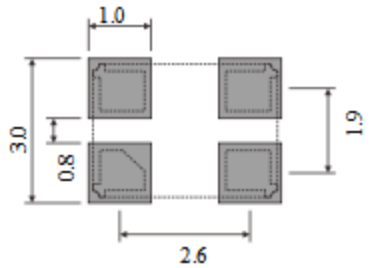
Dimensions and Recommended Land Pattern（外观尺寸及推荐焊盘）

Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
2.0*1.6mm  	 Recommended soldering Pattern
2.5*2.0mm  	 Recommended soldering Pattern
3.2*2.5mm  	 Recommended soldering Pattern

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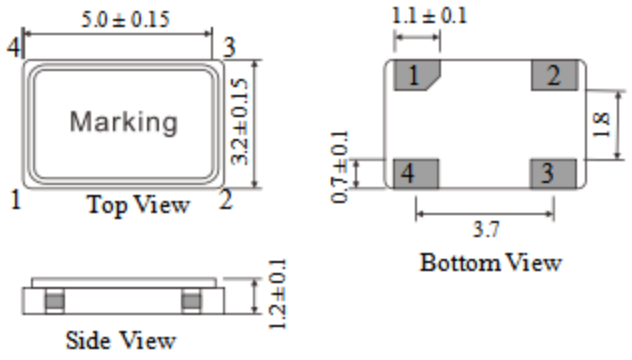
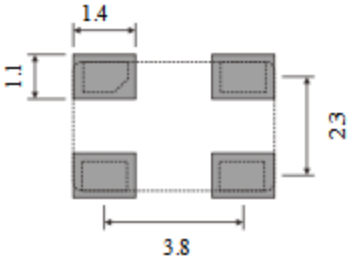
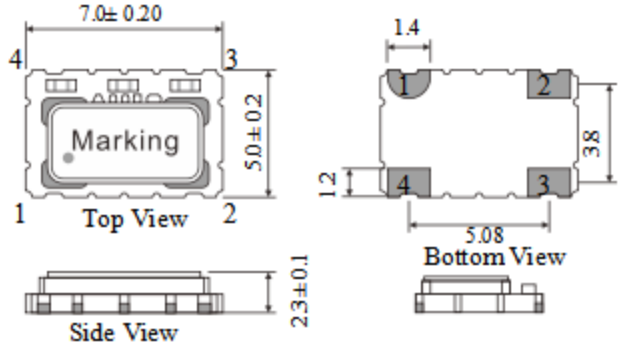
5.0*3.2mm

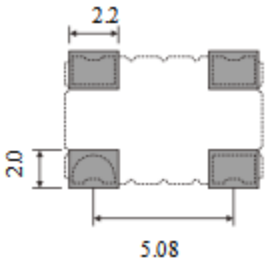




Recommended soldering Pattern

7.0*5.0mm

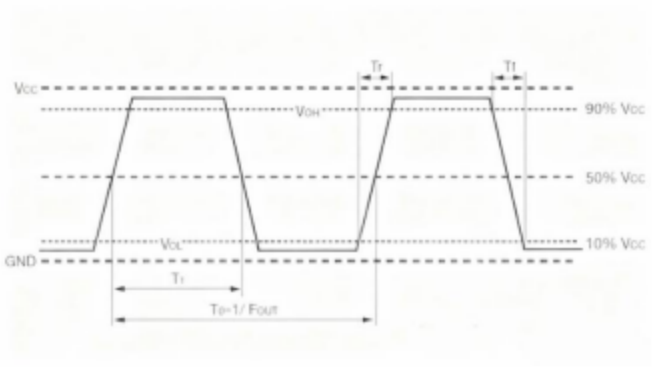
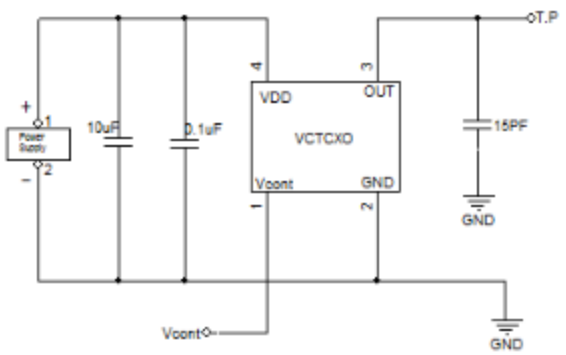




Recommended soldering Pattern

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

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

CMOS	
	

Clipped Sine Wave