

Crystal Oscillator

YSO131LR Low Voltage



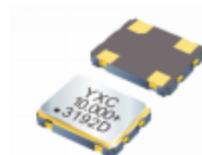
Applications

- IOT
- Industrial Control
- Consumer Electronics

Features

- Frequency Range: 4MHz ~ 50MHz
- Low-power Applications & Energy Consumption-Sensitive Applications

- Package Size: 1.6*1.2, 2.0*1.6, 2.5*2.0, 3.2*2.5mm



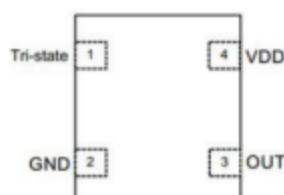
Specifications (规格参数)

Item	Symbol	Specifications
Frequency Range 额定频率范围	f_0	8MHz ~ 50MHz, or specify
Supply Voltage 电源电压	VDD	1.2V, 0.9~2.0V
Output Type 输出方式	-	CMOS
Frequency Tolerance 频率偏差 (at 25°C)	f_{tol}	$\pm 10\text{ppm}$, $\pm 20\text{ppm}$, or specify
Output Load 输出负载	L_{cmos}	10pF
Current Consumption 消耗电流	-	1mA Min ; 2mA Typ; 3mA Max
Operating Temperature 工作温度	T_{use}	-40~+85°C, or specify
Storage Temperature 储存温度	T_{stg}	-55~+125°C
Frequency Versus Temperature Characteristics 频率-温度特性	f_{tem}	$\pm 20\text{ppm}$, $\pm 30\text{ppm}$, $\pm 50\text{ppm}$, or specify
Output Voltage 输出电压	Voh	90%VDD Min
	Vol	10%VDD Max
Duty Cycle 占空比	SYM	45~55%
Start-up Time 启动时间	t_{str}	3ms Max
Rise Time/Fall Time 上升沿/下降沿	tr/tf	8ns Max
Frequency Aging 老化(at 25°C)	f_{age}	$\pm 3\text{ppm/year}$ Max
Tri-State	Enable (High Voltage or Floating)	70% of VDD Min
	Disable (Low Voltage or GND)	30% of VDD Max

Pin Dimension (脚位尺寸)

Pin	#1	#2	#3	#4
FUNCTION	Tri-state	GND	OUTPUT	VDD

Pin Assignments



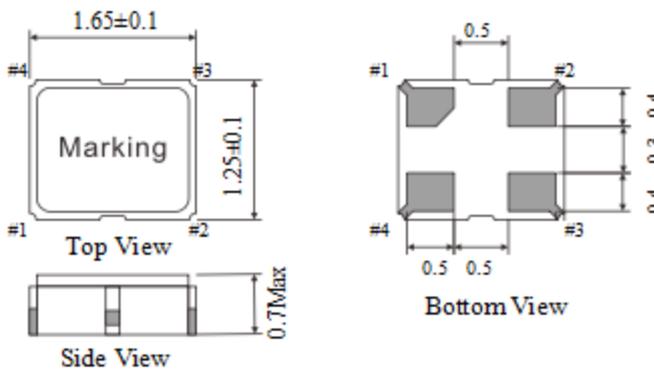
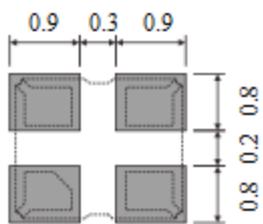
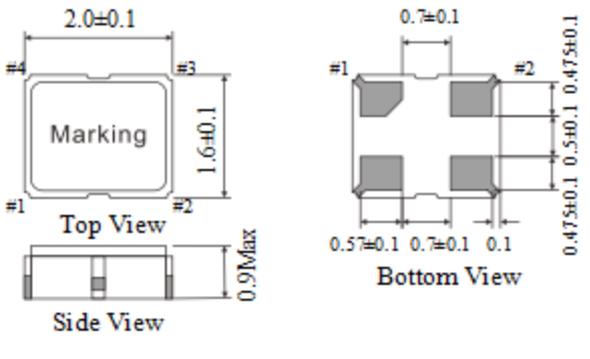
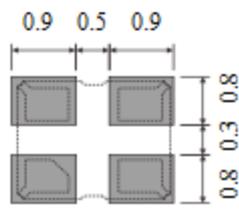
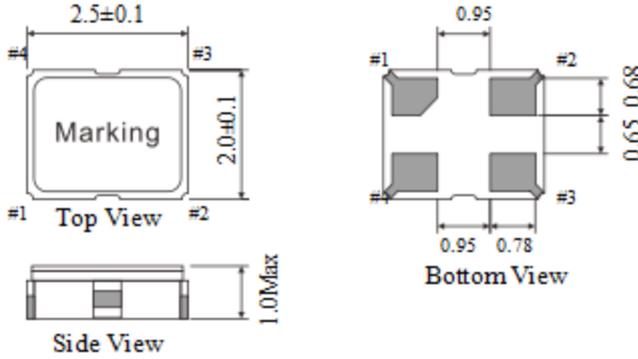
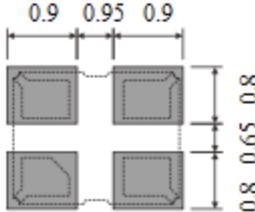
*The picture on the right is only for PIN function description.

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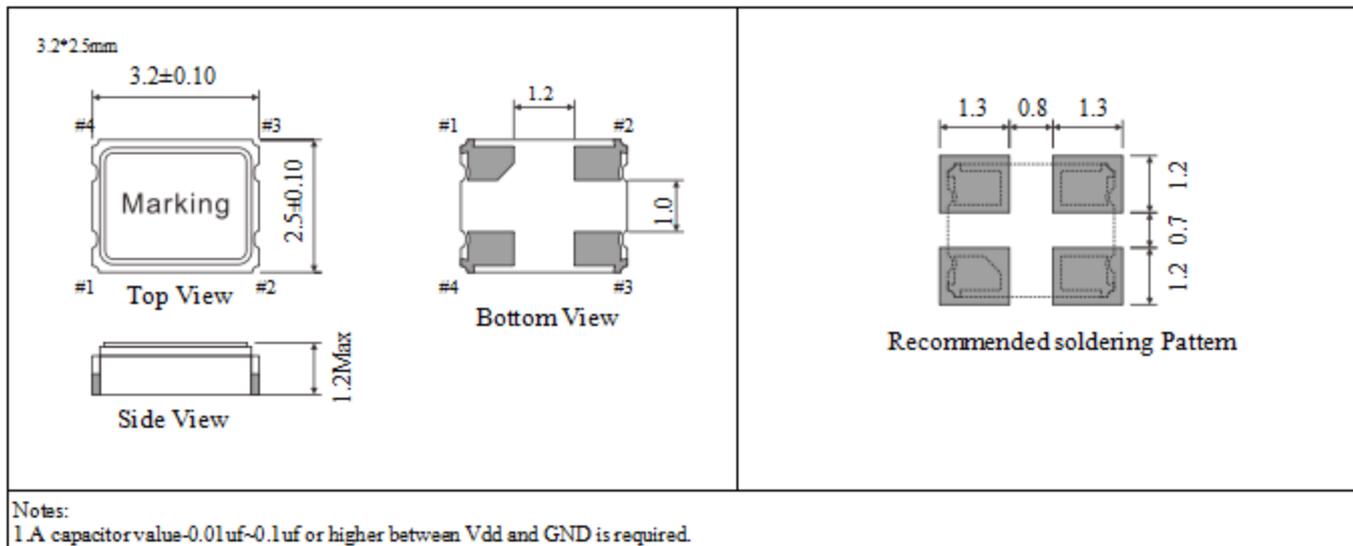
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Dimensions and Recommended Land Pattern (外观尺寸及推荐焊盘)

Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>1.6*1.2mm</p>  <p>Top View</p> <p>Side View</p> <p>Bottom View</p>	 <p>Recommended soldering Pattern</p>
<p>2.0*1.6mm</p>  <p>Top View</p> <p>Side View</p> <p>Bottom View</p>	 <p>Recommended soldering Pattern</p>
<p>2.0*2.5mm</p>  <p>Top View</p> <p>Side View</p> <p>Bottom View</p>	 <p>Recommended soldering Pattern</p>

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Test Circuit (测试电路)

