Crystal Oscillator

YSO110TR Wide Voltage

Applications

- IOT
- Industrial Control
- Consumer Electronics

Features

- Frequency Range: 1MHz ~ 125MHz
- Ultra Small SMD Seam Sealed Crystal Oscillator
- Package Size: 1.6*1.2, 2.0*1.6, 2.5*2.0, 3.2*2.5, 5.0*3.2, 7.0*5.0mm



Specifications（规格参数）

Item		Symbol	Specifications
Frequency Range 额定频率范围		f_0	1MHz ~ 125MHz
Supply Voltage 电源电压		VDD	1.8V ~ 3.3V
Output Type 输出方式		-	CMOS
Frequency Tolerance over Operating Temperature Range 频率频差(at 25℃)		f_tol	±10ppm, ±20ppm, or specify
Output Load 输出负载		L_cmos	15pF
Operating Temperature 工作温度		T_use	-40~+85℃, or specify
Storage Temperature 储存温度		T_stg	-55~+125℃
Frequency Versus Temperature Characteristics 频率-温度特性		f_tem	± 20ppm, ± 30ppm, ± 50ppm, 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	4ns Max
Phase Jitter [12 kHz ~ 20 MHz] 相位抖动		tpj	0.7ps Max
Frequency Aging 老化(at 25℃)		f_age	±3ppm/year Max
Tri-State	Enable（High Voltage or Floating）		70% of VDD Min
	Disable（Low Voltage or GND）		30% of VDD Max

Current Consumption（消耗电流）

Power Dissipation Vcc=1.8~3.3V 15pF only					
Supply Voltage	1.000~40.000MHZ		41.000~54.000MHZ		55.000~100.000MHZ
	7050/5032/3225	2520/2016/1612	7050/5032/3225/2520	2016/1612	7050/5032/3225/2520/2016/1612
1.8V	4mA Max	4mA Max	9mA Max	10mA Max	35mA Max
2.5V	4.5mA Max		10mA Max		
3.3V	5mA Max		12mA Max		

Please contact us for current consumption for frequencies above 100MHz

Crystal Oscillator

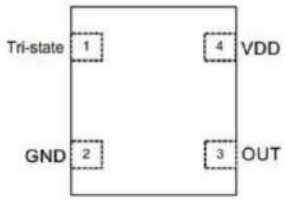
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Pin Dimension（脚位尺寸）

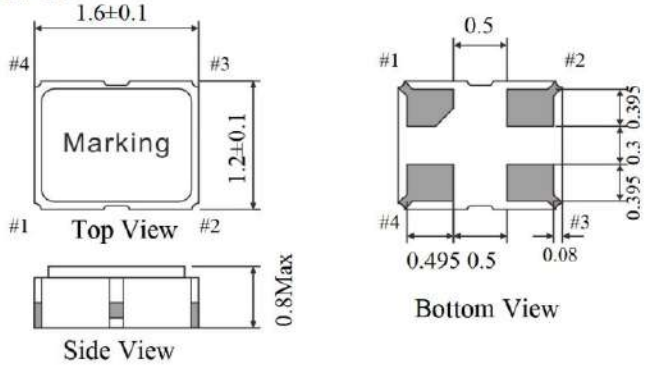
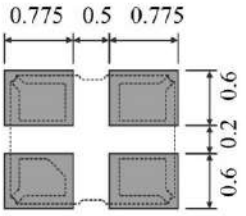
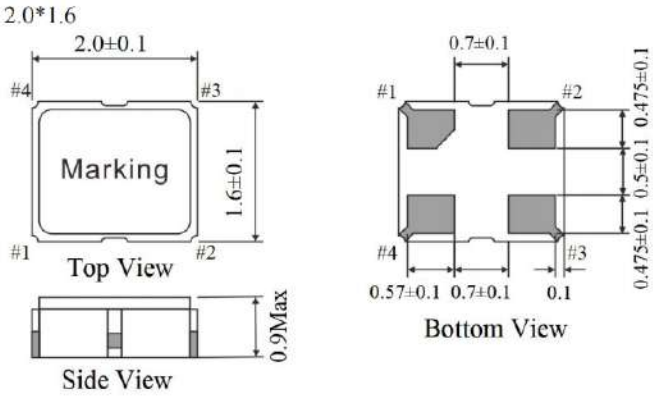
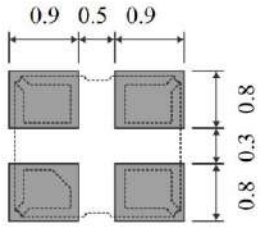
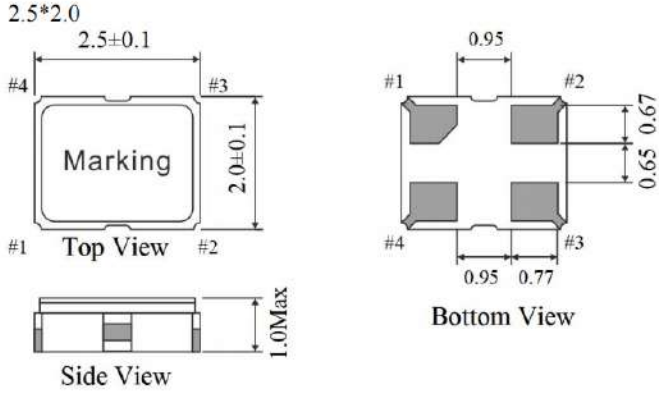
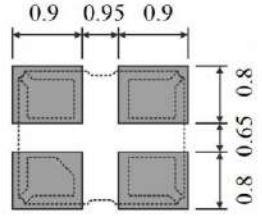
Pin	#1	#2	#3	#4
FUNCTION	Tri-state	GND	OUTPUT	VDD

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

Pin Assignments

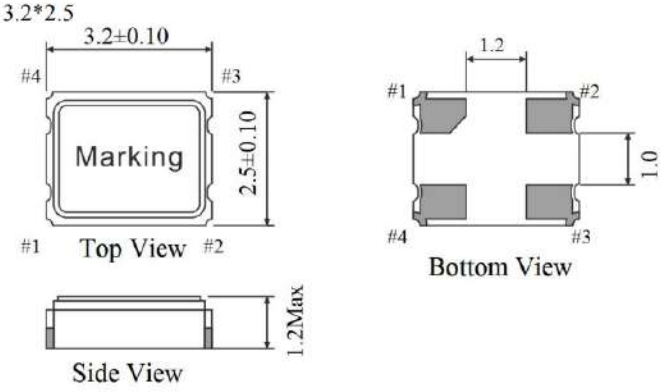


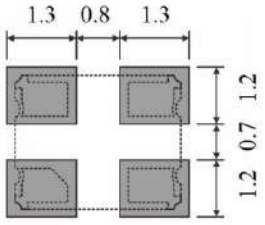
Dimensions and Recommended Land Pattern (外观尺寸及推荐焊盘)

Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
1.6*1.2  	 Recommended soldering Pattem
2.0*1.6  	 Recommended soldering Pattem
2.5*2.0  	 Recommended soldering Pattem

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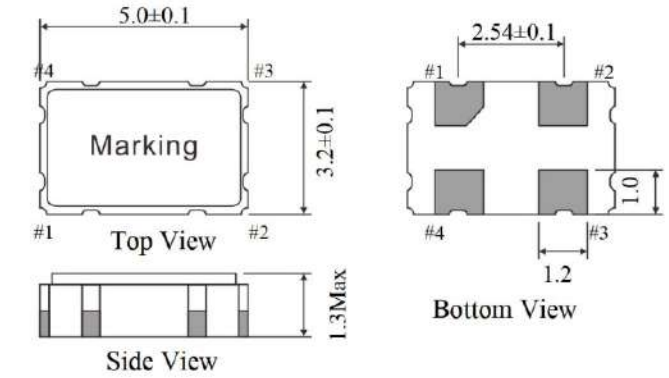
3.2*2.5

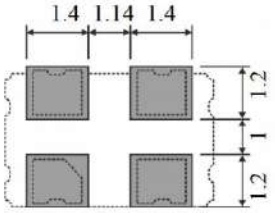




Recommended soldering Pattem

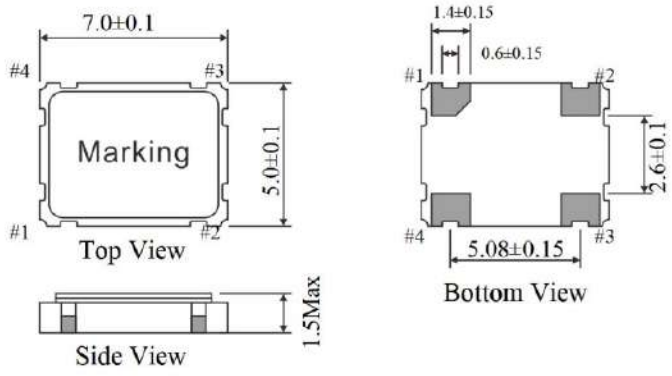
5.0*3.2

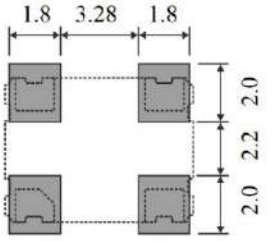




Recommended soldering Pattem

7.0*5.0





Recommended soldering Pattem

Notes:
1.A capacitor value-0.01uf~0.1uf or higher between Vdd and GND is required.

Test Circuit（测试电路）

CMOS

