







# 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)		f₀	1MHz ~ 125MHz	
Supply Voltage(电源电压)		VDD	1.8V ~ 3.3V	
Output Type(输出方式)		-	CMOS	
Frequency Tolerance(频率偏差) (at 25℃ )		f_tol	$\pm 10$ ppm, $\pm 20$ ppm, or specify	
Output Load(输出负载)		L_cmos	15pF	
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	$\pm$ 20ppm, $\pm$ 30ppm, $\pm$ 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°C)		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	1.000~40	0.000MHZ	41.000~54.000MHZ		55.000~100.000MHZ
Voltage	7050/5032/3225	2520/2016/1612	7050/5032/3225/2520	2016/1612	7050/5032/3225/2520/2016/1612
1.8V	4mA Max		9mA Max		
2.5V	4.5mA Max	4mA Max	10mA Max	10mA Max	35mA Max
3.3V	5mA Max		12mA Max		

Please contact us for current consumption for frequencies above 100MHz

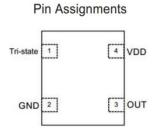






#### Pin Dimension (脚位尺寸)

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



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

Difficultions and Recommended Land Pattern (外观代寸及推存库盘)					
Dimensions (U	nit: mm)	Recommended Land Pattern (Unit: mm)			
1.6*1.2mm  #4  #4  MARKING  #2  ***  ***  ***  ***  ***  ***  ***	Bottom #1 #2 \$660 600 \$600 \$600 \$600 \$600 \$600 \$600	0.775 0.5 0.775			
2.0*1.6mm  #4    2.05±0.1	Bottom #2 #2 0.57±0.1 0.7±0.1 0.1 0.57±0.1 0.7±0.1 0.1	0.775 0.5 0.775			
2.5*2.0mm 2.5±0.1 #3 #3 TT.0±0.7	#1 #2 #3 #4 #3 0.95 0.78	0.9 0.95 0.9			

<sup>\*</sup>The picture on the right is only for PIN function description.



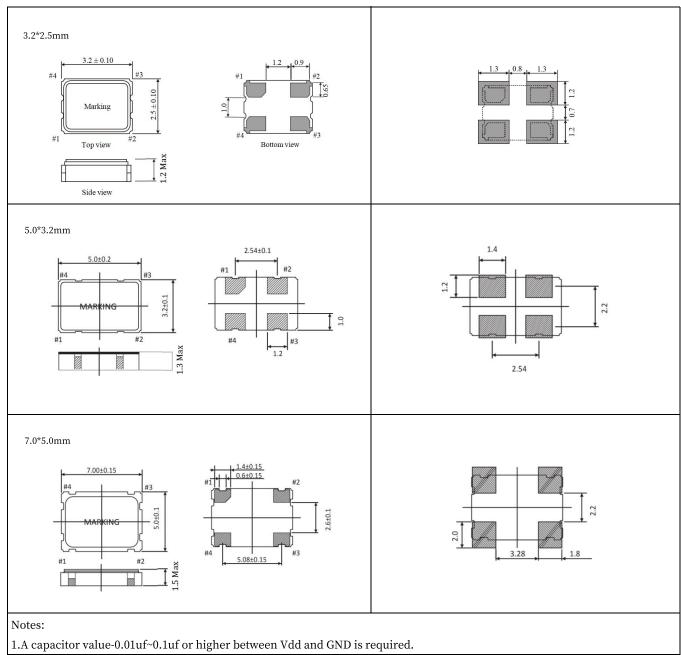








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Test Circuit (测试电路)

