

Crystal Oscillator

YSO120TK

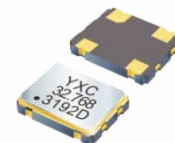


Applications

- RTC

Features

- Frequency: 32.768KHz
- 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
- Ultra Small SMD Seam Sealed Crystal Oscillator



Specifications (规格参数)

Item	Symbol	Specifications
Nominal Frequency (标称频率)	f_0	32.768KHz
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°C)	f_{tol}	$\pm 10ppm$, $\pm 20ppm$, 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
Phase Jitter [12 kHz ~ 20 MHz] (相位抖动)	tpj	0.7ps Max
Frequency Aging (老化) (at 25°C)	f_{age}	$\pm 3ppm/year$ 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)

Supply Voltage (V)	32.768KHZ	
	7050/5032/3225	2520/2016/1612
1.8V	0.2mA Max	0.2mA Max
2.5V	0.3mA Max	0.3mA Max
3.3V	0.5mA Max	0.4mA Max

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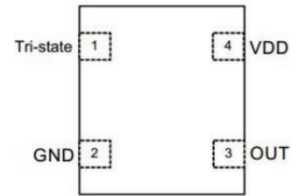
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Pin Dimension (脚位尺寸)

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

Pin Assignments



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

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>2.0*1.6mm</p>	
<p>2.5*2.0mm</p>	

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<p>3.2*2.5mm</p>	
<p>5.0*3.2mm</p>	
<p>7.0*5.0mm</p>	
<p>Notes:</p> <p>1.A capacitor value-0.01uf~0.1uf or higher between Vdd and GND is required.</p>	

Test Circuit (测试电路)

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