

# Crystal Oscillator

## YSO130HR High Voltage



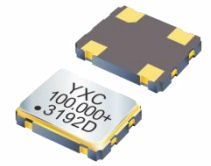
### Applications

- Consumer Electronics
- Industrial Control

### Features

- Frequency range: 1MHz-100MHz
- Ultra Small SMD seam sealed crystal oscillator units.

- Package Size: 3.2\*2.5, 5.0\*3.2  
7.0\*5.0 mm



## Specifications (规格参数)

| Item   | Symbol            | Specifications                        |
|--|-------------------|---------------------------------------|
| Frequency Range (额定频率范围)                               | f <sub>o</sub>    | 1MHz to 100MHz, or specify            |
| Supply Voltage (电源电压)                                  | V <sub>cc</sub>   | 5V                                    |
| Output Type (输出方式)                                     | -                 | CMOS                                  |
| Frequency Tolerance (频率偏差) (at 25°C)                   | f <sub>tol</sub>  | ±10ppm, ±20ppm, or specify            |
| Output Load (输出负载)                                     | L <sub>cmos</sub> | 15pF                                  |
| Operating Temperature (工作温度)                           | T <sub>use</sub>  | -40~+85°C, or specify                 |
| Storage Temperature (储存温度)                             | T <sub>stg</sub>  | -55~+125°C                            |
| Frequency Versus Temperature Characteristics (频率-温度特性) | f <sub>tem</sub>  | ± 20ppm, ± 30ppm, ± 50ppm, or specify |
| Duty Cycle (占空比)                                       | SYM               | 45~55%                                |
| Start-up Time (启动时间)                                   | t <sub>str</sub>  | 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 <sub>age</sub>  | ±3ppm/year Max.                       |

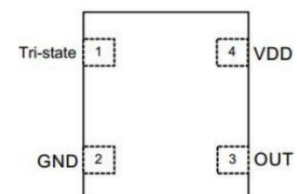
## Current Consumption (消耗电流)

| Power Dissipation 15pF only |           |          |
|-----------------------------|-----------|----------|
| Frequency                   | 5V        |          |
|                             | 7050/5032 | 3225     |
| 1~36MHZ                     | 8mA max   | 8mA max  |
| 36~70MHZ                    | 20mA max  | 20mA max |
| 70~100MHZ                   | 55mA max  | 25mA 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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### Dimensions and Recommended land pattern (外观尺寸及推荐焊盘)

| Package Size - Dimensions(Unit:mm) | Recommended Land Pattern(Unit:mm) |
|------------------------------------|-----------------------------------|
| <p>3.2*2.5mm</p>                   |                                   |
| <p>5.0*3.2mm</p>                   |                                   |
| <p>7.0*5.0mm</p>                   |                                   |

**Notes:**

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

### Test Circuit (测试电路)

