

# Programmable Crystal Oscillator YSO160PR



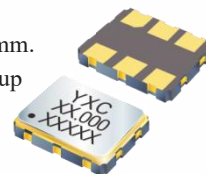
## Applications

- 10 GB Ethernet,  
SONET, SATA, SAS,  
Fibre Channel.

## Features

- Freq. Range: 10MHz-250MHz.  
- Ultra Small SMD seam sealed crystal oscillator units.

- Package Size: 3.2\*2.5, 5.0\*3.2, 7.0\*5.0mm.  
- High precision characteristic covering up to wide frequency range.

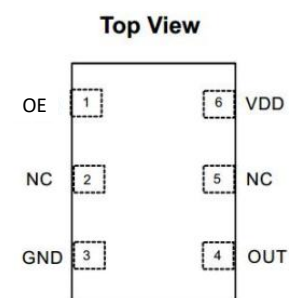


## Specifications

| Item / Type                                      | SMD VCXO | CMOS                              |
|--------------------------------------------------|----------|-----------------------------------|
| Output Frequency Range                           |          | 10MHz to 250MHz, or specify       |
| Supply Voltage                                   |          | 2.5V or 3.3V                      |
| Total Stability                                  |          | ±30ppm, ±50ppm or specify         |
| Operating Temperature Range                      |          | -40~+85°C, or specify             |
| Storage Temperature Range                        |          | -55~+125°C                        |
| Input Resistance                                 |          | 1Mohms Typ                        |
| Current Consumption                              |          | 40mA Max                          |
| Output Load                                      |          | 15pF(max)                         |
| Voltage Vol ( Max. ) / Vol ( Min. )              |          | VOH = 90%Vdd/VOL = 10%Vdd         |
| Duty Cycle                                       |          | 45~55%                            |
| Input Voltage                                    |          | VIH=70% Vcc Min, VIL=30% Vdd Max. |
| Rise Time / Fall Time<br>( 20% to 80% Waveform ) |          | 4.0nsec ( max. )                  |
| Start-up Time                                    |          | 10msec. ( max. )                  |
| Aging                                            |          | ±3 ppm / year Max.                |
| RMS Jitter [ 12 kHz ~ 20 MHz ]                   |          | 1.0pS Typ.                        |

## Pin Dimension

| Pin      | #1 | #2 | #3  | #4  | #5 | #6  |
|----------|----|----|-----|-----|----|-----|
| FUNCTION | OE | NC | GND | OUT | NC | VDD |



**Figure 1. Pin Assignments**

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## Dimensions and Recommended land pattern

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