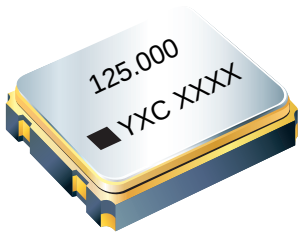




# YSO321SR



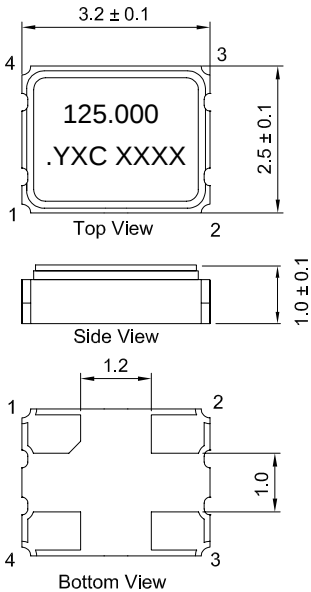
## Features

- External dimensions: 3.2 x 2.5 x 1.0 mm.
- Frequency range: 1MHz ~ 150MHz.
- Ultra Small SMD seam sealed clock crystal oscillator units.
- Applications: WLAN, Bluetooth, DSC, DSL and other IT product.
- Tri-state function available

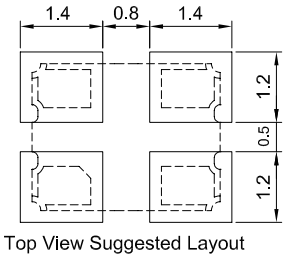
## Electrical Specifications

| Item / Type                         | YSO321SR                                     |
|-------------------------------------|----------------------------------------------|
| Output Frequency Range              | 1 ~ 150 MHz                                  |
| Output Type                         | CMOS                                         |
| Supply Voltage                      | 1.8V/2.5V/3.3V/5V, or specify                |
| Oscillation Mode                    | Fundamental / 3rd Overtone                   |
| Frequency Tolerance                 | ± 20ppm, ±25ppm, or specify                  |
| Output Load                         | 15 pF, or specify                            |
| Operating Temperature Range         | - 20 ~ + 70 °C , - 40 ~ + 85 °C , or specify |
| Storage Temperature Range           | - 40 ~ + 85 °C , - 55 ~ + 125 °C             |
| Voltage Vol ( Max. ) / Vol ( Min. ) | 90%Vdd min./10%Vdd max                       |
| Symmetry                            | 40 ~ 60 %    Standard                        |
| Rise ( Tr ) / Fall ( Tf ) Time      | 8 ns Max.                                    |
| Start-up Time                       | 10 ms Max.                                   |
| Supply Current                      | See Below                                    |
| Frequency Aging ( at 25 °C )        | ± 3 ppm / year Max.                          |

## Dimensions



| 引脚功能定义 |        |          |
|--------|--------|----------|
| 引脚     | 功能     | 定义       |
| 1      | E/D    | 三态 / 无三态 |
| 2      | GND    | 接地       |
| 3      | OUTPUT | 输出       |
| 4      | Vdd    | 电源电压     |



Units: mm



# YSO321SR



## ★ PART NUMBER GUIDE

e.g. O3225125MEEA4SC

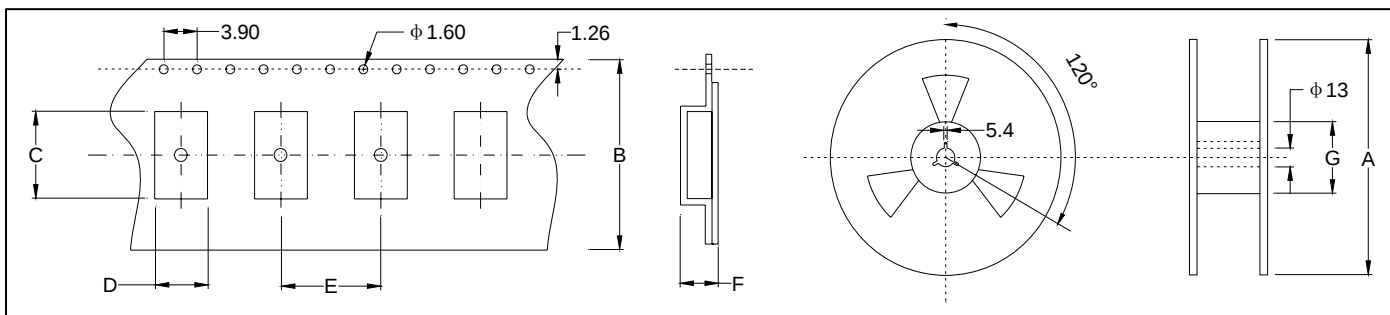
YSO321SR=3.2×2.5 SMD SEAM TYPE

| Quartz Crystal Oscillator | Dimensions | Frequency (Hz) | Supply voltage (V) | Frequency Stability Overall (ppm) | output | Pin | Material | Operating Temp. Range |
|---------------------------|------------|----------------|--------------------|-----------------------------------|--------|-----|----------|-----------------------|
| O                         | 3225       | 125M           | E                  | E                                 | A      | 4   | S        | C                     |

## ★ INPUT CURRENT

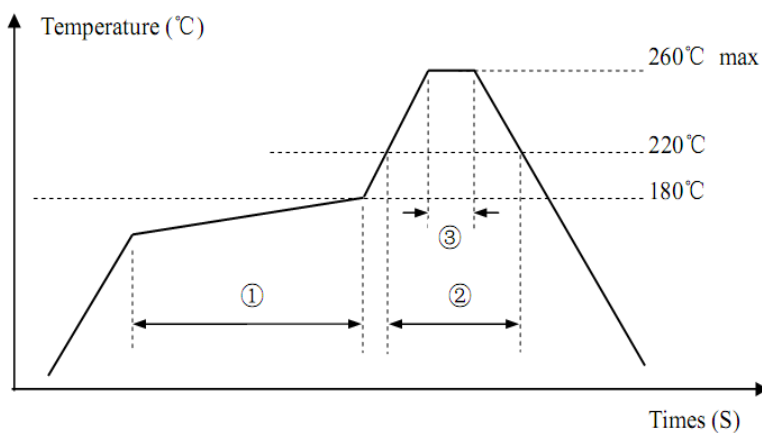
| Vdc=5.0V          |           | Vdc=1.8~3.3V      |          |
|-------------------|-----------|-------------------|----------|
| 15pF only         |           | 15pF only         |          |
| 1.0 ~ 35.999 MHz  | 25 mA max | 1.0 ~ 35.999 MHz  | 20mA max |
| 36.0 ~ 69.999 MHz | 60mA max  | 36.0 ~ 69.999 MHz | 40mA max |
| 70.0 ~ 150 MHz    | 80mA max  | 70.0 ~ 150 MHz    | 60mA max |

## ★ TAPING SPECIFICATION (Unit: mm)



|                   | A       | B        | C         | D         | E        | F        | G        |
|-------------------|---------|----------|-----------|-----------|----------|----------|----------|
| OSC-SMD3225       | 180±2.0 | 12.1±0.3 | 4.03±0.15 | 3.11±0.15 | 3.85±0.1 | 1.38±0.1 | 61.6±1.0 |
| 3000 pcs per reel |         |          |           |           |          |          |          |

## ★ REFLOW SOLDERING PROFILE



|                     |   |              |           |             |
|---------------------|---|--------------|-----------|-------------|
| Pb free reflow<br>A | ① | Preheat      | 160~180°C | 120sec. max |
|                     | ② | Primary heat | 220°C     | 60sec. max  |
|                     | ③ | Peak         | 260°C     | 10sec. max. |

## ★ Test Circuit

