

# CRYSTAL UNIT

## YSX321SL

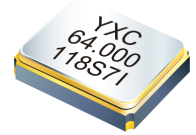


### Applications

- SmartWearable IOT Communication.

### Features

- Dimensions: 3.20 x 2.50 x 0.70 mm.
- Standard Frequency: 8 to 64MHz
- High precision and high frequency stability.
- Extremely good for reducing EMI effect.



## Specifications

Standard Frequency	8 to 64 MHz
Vibration Mode	AT Fundamental
Load Capacitance	10pF, 20pF, or specify
Frequency Tolerance (at 25 °C)	±10ppm, ±20ppm, or specify
Frequency Versus Temperature Characteristics	±20ppm, or specify
Operating Temperature	-20~+70°C, -40~+85°C, or specify
Storage Temperature	-55~+125°C or specify
Shunt Capacitance	7 pF Max.
Level of Drive	1~200µWMax. (100uW typical)
Aging (at 25 °C)	±3ppm/year Max.

## Equivalent Series Resistance(ESR)

Fundamental	
8 ~ 11.2892MHz	150 Ω Max.
12 ~ 16 MHz	80 Ω Max.
17 ~ 64 MHz	50 Ω Max.

## Dimensions and Patterns [unit:mm]

Package Size – Dimensions (Unit: mm)

The technical drawings include:

- Top View:** Shows a square package with dimensions 3.20±0.1 mm by 2.50±0.1 mm. The corners are numbered 1, 2, 3, and 4. A central area is labeled "Marking".
- Side View:** Shows the package height as 0.7±0.1 mm.
- Bottom View:** Shows the internal layout with dimensions 1.2 mm and 0.7 mm. Corners are numbered 1, 2, 3, and 4.
- Top View Crystal Connection:** Shows the internal electrical connections with terminals labeled GND, 1, 2, 3, and 4.
- Top View Suggested Layout:** Shows the recommended pad dimensions: 1.4 mm for the outer pads and 0.8 mm for the inner pads. The pad thickness is 1.2 mm, and the spacing between pads is 0.5 mm.

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### Reflow Soldering Profile

Pre Heating Temperature

    Tp1 ~ Tp2 = + 170 °C

Heating Temperature

    TMlt = + 220 °C

Peek Temperature

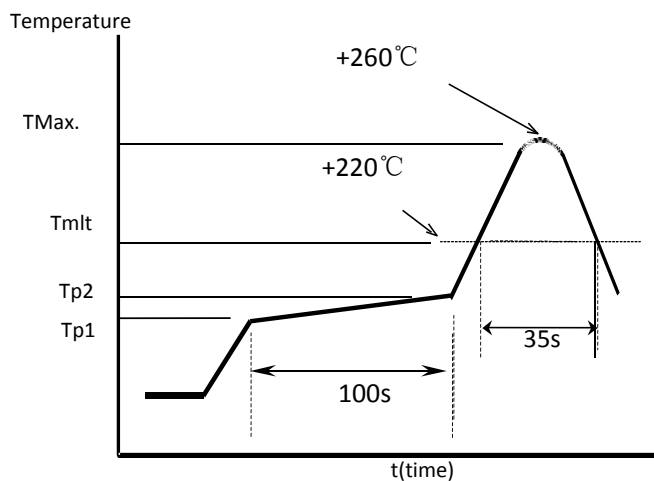
    TMax. = + 260 °C

Point of measuring

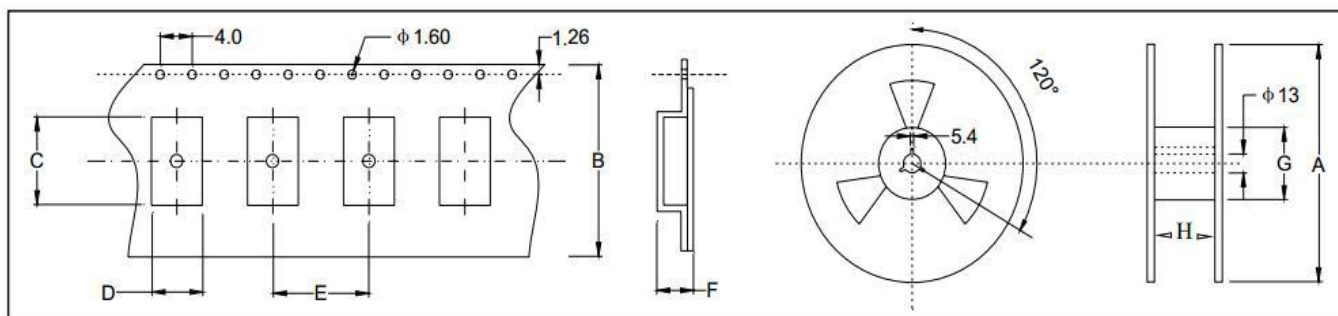
    In case of Solder ability

Terminal.

    In case of Resistance to soldering heat  
    Surface.



### Taping Specification(Unit: mm)



Size	A	B	C	D	E	F	G	H
SMD-3225	180±2.0	8.0±0.3	3.50±0.1	2.50±0.1	4.0±0.1	1.40±0.1	61.0±1.0	8.0±1.0

3000 pcs per reel