

CRYSTAL UNIT

YSX321SL



X322520MSB4SI

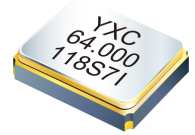
Applications

- 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	20MHz
Vibration Mode	AT Fundamental
Load Capacitance	20pF
Frequency Tolerance (at 25 °C)	±10ppm
Frequency Versus Temperature Characteristics	±20ppm
Operating Temperature	-40~+85°C
Storage Temperature	-55~+125°C
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 show the following dimensions and features:

- Top View:** Overall dimensions are 3.20±0.1 mm by 2.50±0.1 mm. The package is marked with 'Marking' in the center. Lead positions are numbered 1, 2, 3, and 4.
- Side View:** The package height is 0.7±0.1 mm.
- Bottom View:** Shows the lead layout with a 1.2 mm spacing between leads 1 and 2, and a 0.7 mm lead width.
- Top View Crystal Connection:** Shows the internal connection points for 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

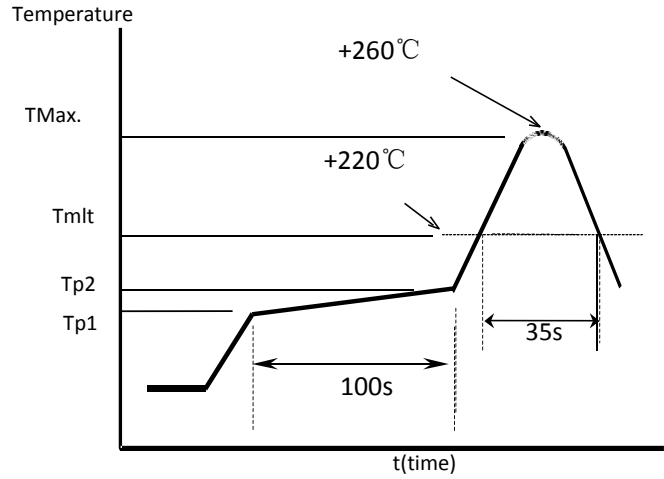
 TMax. = + 260 °C

Point of measuring

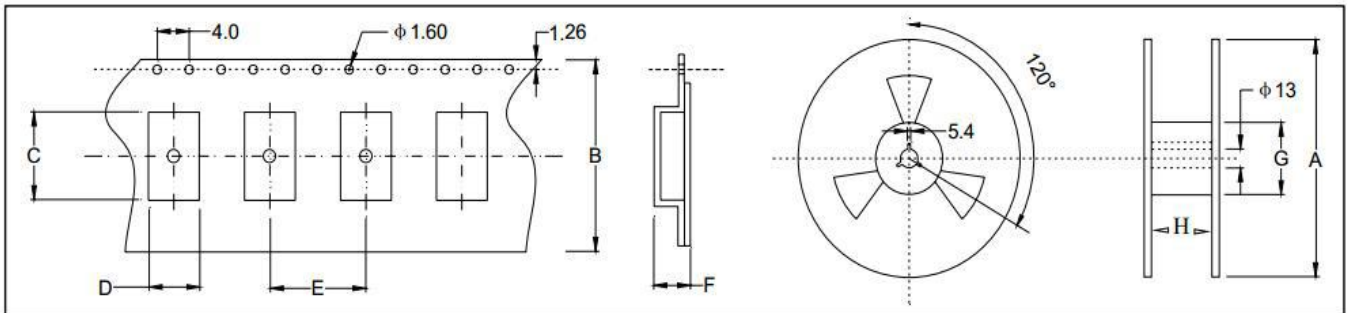
 In case of Solder ability

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