## **CRYSTAL UNIT**

## 32.768KHZ

# YSX306GA Glass Sealed













#### **Applications**

#### **Features**

RTC.

- Dimensions:8.00 x 3.80 x 2.54 mm.
- Standard Frequency: 32.768KHz
- Reflow is possible.
- Contains Pb in sealing glass exempted by RoHS directive.

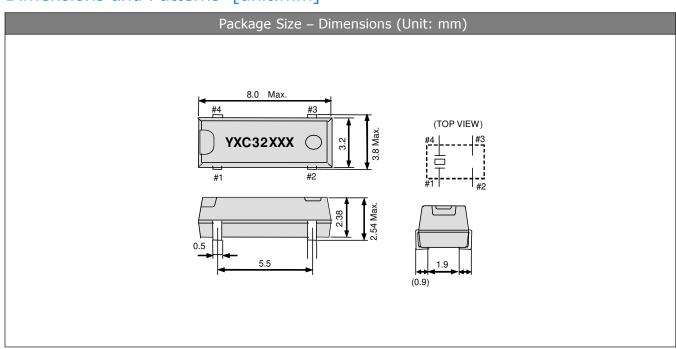
### **Specifications**

Standard Frequency	32.768 KHz			
Load Capacitance	7pF, 9pF, 12.5pF, or specify			
Frequency Tolerance (at 25 °C)	±10ppm, ±20ppm, or specify			
Parabolic Coefficient	( - 0.036 ± 0.006 ) * $10^{-6}$ / °C <sup>2</sup>			
Operating Temperature	-40~+85°C, or specify			
Storage Temperature	-55~+125℃			
Shunt Capacitance	2.0pF Max.			
Motional Capacitance	3.0fF			
Level of Drive	1.0μWMax			
Aging (at 25 ℃ )	±5ppm/year Max.			

#### Equivalent Series Resistance(ESR)

VSV306CV	
13A300GA	
50K $\Omega$ Max.	

#### Dimensions and Patterns [unit:mm]



## **CRYSTAL UNIT**













# YSX306GA Glass Sealed

**Reflow Soldering Profile** 

Pre Heating Temperature Tp1 ~ Tp2 = + 170 °C

**Heating Temperature** 

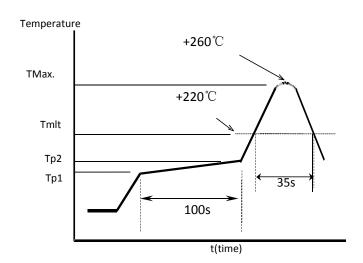
TMIt = + 220 °C

Peek Temperature

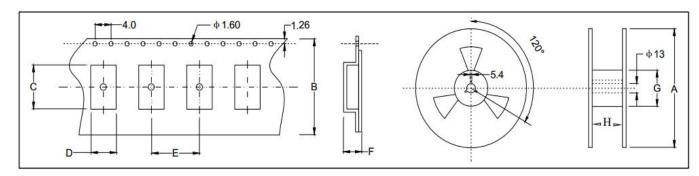
TMax. = + 260 °C

Point of measuring In case of Solder ability

In case of Resistance to soldering heat Surface.



### Taping Specification(Unit: mm)



Size	А	В	С	D	Е	F	G	Н		
SMD-8038	330±2.0	16.0±0.3	8.20±0.1	4.00±0.1	4.0±0.1	2.65±0.1	61.0±1.0	16.0±1.0		
3000 pcs per reel										

# CRYSTAL UNIT 32.768KHZ











# YSX306GA Glass Sealed

#### Handling Notice for Standard Tuning Fork Crystal (Cylindrical Type)

#### 1. Shock resistance

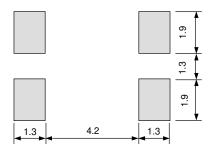
It may deteriorate the characteristics or cause of no oscillation if excess physical shock given. Please be careful not to drop. Please use under condition to minimize the shocks as much as possible. Please review the conditions if it is used by auto mounting or after the conditions are changed.

#### 2. Heat and humidity resistance in storage

Storing the crystal products under higher or lower temperature or high humidity for a long period may deteriorate the characteristics of crystal units. Please store and use the crystal products at the normal temperature and humidity.

### 3. Mounting method to PCB

When the crystal products need to be lay down please fix to PCB securely. If the crystal is used with mechanical vibration location, please put cushion in between PCB or fix with elasticity glue (Silicon etc) as shown in below figure. Please don't gluing hermetic seal grass.



#### 4. Ultrasonic cleaning and ultrasonic soldering

Soldered by ultrasonic cannot be guaranteed, because crystal maybe sympathetic vibrated and may damage. Please study at your side about ultrasonic cleaning.

#### 5. Drive level

Applying excessive drive level to the crystal units may cause deterioration of characteristics or damage. Less then  $1.0\mu W$  is recommended to this products. More than  $2.0\mu W$  cannot be guaranteed.

#### REVIEW OF SPECIFICATION

When something get doubtful with this specifications, we shall jointly work to get an agreement.