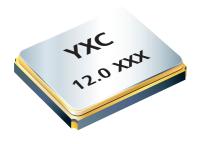
## YSX321SL









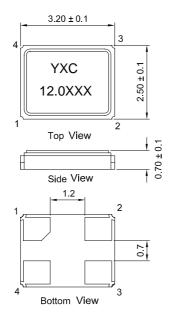
### **Features**

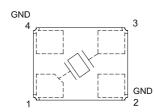
- · External dimensions: 3.2 x 2.5 x 0.8 mm.
- · Frequency range: 11.0592MHz ~ 54MHz.
- · High precision and high frequency stability.
- · Extremely good for reducing EMI effect.
- · RoHS Compliant / Pb Free.
- The best choice of Bluetooth, wireless communication set, DSC, PDA and mobile phone.

Electrical Specifications	
Item / Type	YSX321SL
Nominal Frequency Range	11.0592~ 54 MHz
Vibration Mode	AT Fundamental
Load Capacitance	12pF, 20pF, or specify
Frequency Tolerance (at 25 °C)	± 10 ppm, ± 20 ppm, or specify
Frequency Versus Temperature Characteristics	±20 ppm, or specify
Operating Temperature	- 20 ~ + 70 °C , - 40 ~ + 85 °C , or specify
Storage Temperature	$-40 \sim +85 ^{\circ}\mathrm{C}$ , or specify
Shunt Capacitance	7 pF Max.
Level Of Drive	1~100 μW Max. (10 uW typical)
Frequency Aging (at 25 °C)	± 3 ppm / year Max.
Insulation Resistance	More Than $500M\Omega$ at DC $100V$

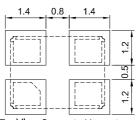
# Equivalent Series Resistance(ESR) Fundamental 80 Ω Max. 11.0592 ~ 16 MHz 80 Ω Max. 16 ~ 20 MHz 60 Ω Max. 20 ~ 54 MHz 40 Ω Max.

## Dimensions





Top View Crystal Connection



TopView Suggested Layout

Units: mm

# YSX321SL







## ★ PART NUMBER GUIDE 部件号示例 e.g. X322512MSB4SC

### $YSX321SL = 3.2 \times 2..5$ SMD SEAM TYPE

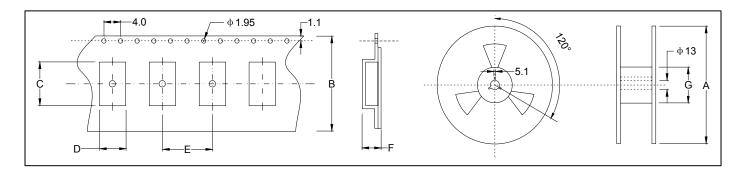
Quartz Crystal Resonator	Dimensions	Frequency (Hz)	Load Capacitance (Pf)	Frequency Stability Overall (ppm)	Pin	Material	Operating Temp. Range
X	3225	12M	S	В	4	S	С

Load Capacitance (Pf)					
X	7.4pF				
G	12.5pF				
L	9pF				
M	10pF				
О	12pF				
Р	15nF				

Frequency tolerance					
В	±10PPM				
D	±20PPM				

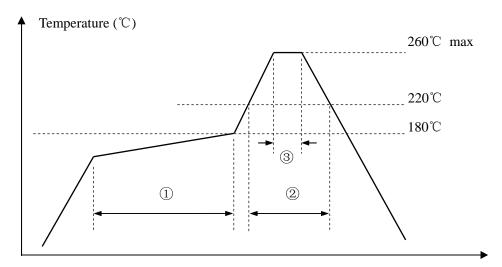
Operating temperature				
С	-20~+70°C			
I	-40~ +85°C			
Α	-40~ +125°C			
F	-40~+105°C			

## ★ TAPING SPECIFICATION (Unit: mm) 编带规格



	A	В	С	D	Е	F	G
SMD3225	$178 \pm 2.0$	$8.03 \pm 0.3$	$3.81 \pm 0.10$	$3.04\pm0.10$	3.84±0.1	$1.54 \pm 0.10$	$62.0 \pm 1.0$
3000 pcs per reel							

### ★ REFLOW SOLDERING PROFILE 回流焊特性



Times (S)

Pb free reflow	1	Preheat	160~180℃	120sec. max
A The left of the	2	Primary heat	220℃	60sec. max
A	3	Peak	260℃	10sec. max.