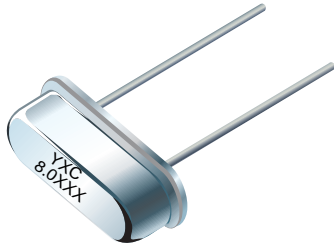




# HC-49XS



## Features

- External dimensions: 7.0x 4.0x 1.5mm.
- Frequency range: 8 MHz ~ 50MHz.
- Through hole type crystal units.
- A great number of standard frequencies.
- High frequency pullability and low equivalent series resistance.
- Highly mass production capability.
- Applications: PC, STB, LCDM and Cable Modem.

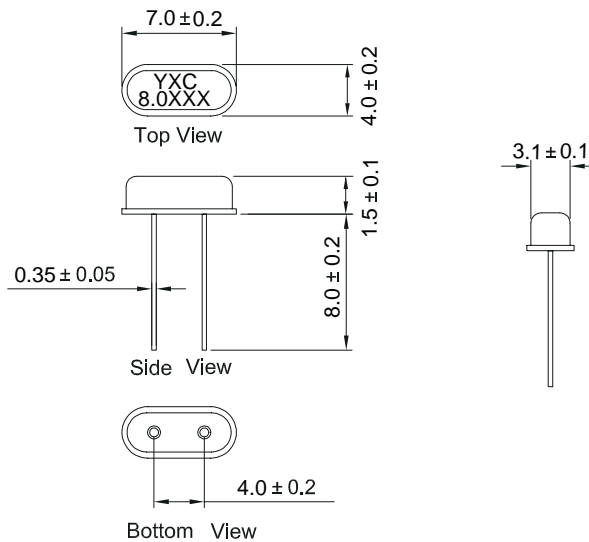
## Electrical Specifications

Item / Type	HC-49XS
Nominal Frequency Range	8~50MHZ
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 ~ +85 °C , or specify
Shunt Capacitance	5pFMax.
Level of Drive	0.01~1000μW
Frequency Aging (at 25 °C)	± 3 ppm / year Max.

## Equivalent Series Resistance(ESR)

Fundamental	
8.000 ~ 11.999MHz	80 Ω Max.
12.000~15.999MHz	60 Ω Max.
16.000~19.000MHz	50 Ω Max.
20.000~50.000MHz	40Ω Max.

## Dimensions



Units: mm



# HC-49XS



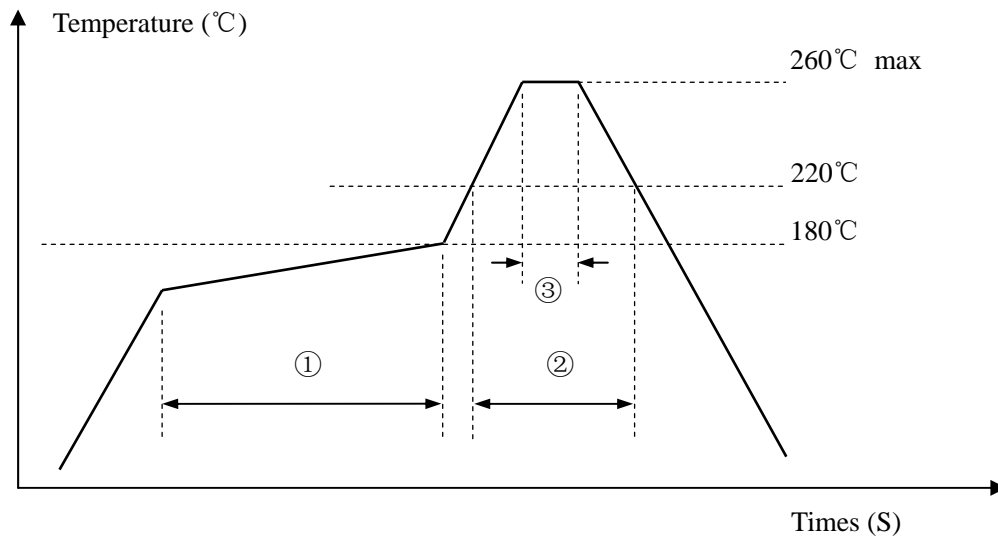
★ PART NUMBER GUIDE

e.g. X49XD12MSD2SC

HC-49XS= 7.0 × 4.0DIP SEAM TYPE

Quartz Crystal Resonator	Dimensions	Frequency (Hz)	Load Capacitance (PF)	Frequency Stability Overall (ppm)	Pin	Material	Operating Temp. Range
X	49XD	12M	S	D	2	S	C

★ WAVE SOLDERING PROFILE



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