

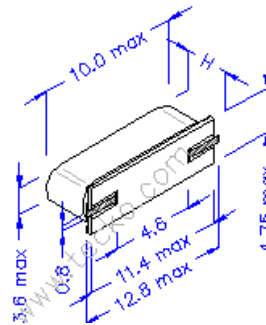
# Crystal Unit



HC-49S/SMD . HC-49SS/SMD



- Two heights available
- Low profile
- Both tape & reel package and bulk package available
- Suitable for various applications



(mm)	HC-49S/SMD	HC-49SS/SMD
H	4.1	3.2

## Standard Parameter

Frequency Range	3.2768 MHz ~ 80.000 MHz	
Frequency Tolerance (at 25 °C)	±10ppm / ±20ppm / <b>±30ppm</b>	
Load Capacitance	<b>16Pf / 20Pf / upon request</b>	
Frequency Stability	±10ppm / ±30ppm	<b>±50ppm</b>
Operating Temperature Range	<b>-20 °C ~ +70 °C</b>	-40 °C ~ +85 °C
Storage Temperature Range	<b>-40 °C ~ +85 °C</b>	-55 °C ~ +125 °C
Equivalent Resistance	Refer to the following table	
Shunt Capacitance	7 Pf max	
Drive Level	100 Mw max	
Insulation Resistance	500MΩ min at DC100V ±15V	
Aging (at 25 °C per year)	±5ppm	

Frequency Range (MHz)	Mode of Oscillation	Series Resistance	
		HC-49S	HC-49SS
3.2768	Fundamental	200 Ω	
3.579545 ~ 3.999		150 Ω	150 Ω
4.000 ~ 4.999		120 Ω	120 Ω
5.000 ~ 5.999		100 Ω	120 Ω
6.000 ~ 7.999		80 Ω	80 Ω
8.000 ~ 9.999		60 Ω	80 Ω
10.000 ~ 11.999		50 Ω	50 Ω
12.000 ~ 13.999		40 Ω	50 Ω
14.000 ~ 15.999		40 Ω	40 Ω
16.000 ~ 19.999		35 Ω	40 Ω
20.000 ~ 35.000		30 Ω	40 Ω
27.000 ~ 31.999		3 <sup>rd</sup> Overtone	100 Ω
32.000 ~ 75.000	80 Ω		80 Ω
75.001 ~ 80.000	100 Ω		