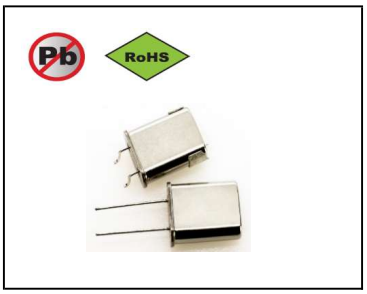
HC-49U CRYSTAL UNIT



■ **HC-49U XTAL Height : 13.46mm**

- Metal Thru-Hole package
- Fundamental, 3rd and 5th overtone crystal design
- Tight stability and Wide temperature range available
- Insulator, Metal Jacket & Gullwing available

● Applications : Consumer electronics, Industrial applications, Telecommunications

■ Standard Specification

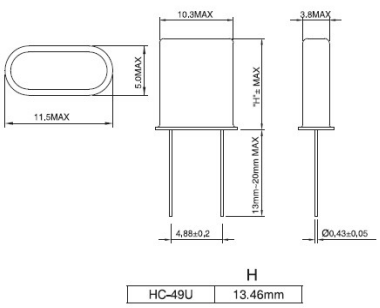
Frequency range	1.8432MHz to 125.000MHz	
Oscillation mode	Fundmental, 3rd & 5th overtone	
Load capacitance (CL)	6pF to 32pF or please specify	
Frequency tolerance (25℃)	±10ppm, ±20ppm, ±30ppm, ±50ppm	
Frequency Stability vs Temp range	Temp Stability	Operating temp
	±15ppm ±20ppm ±30ppm ±50ppm ±100ppm	-10 to +60℃ -20 to +70℃ -40 to +85℃ -40 to 105℃ -40 to 125℃
Storage temperature range	-55℃ to +125℃	
Shunt Capacitance (C0)	7.0pF Max	
Level of drive (DL)	100㎼ Max (std) or please specify	
Aging (Initial first year)	± 3ppm Max	

■ Motional resistance (ESR)

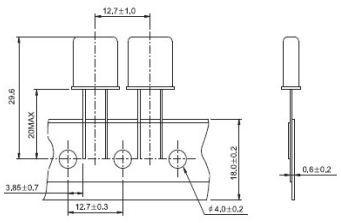
Frequency (MHz)	Mode	CI (Ω) max	Frequency (MHz)	Mode	CI (Ω) max
1.8432 ≤ f < 3	F	400	7 ≤ f < 16	F	40
3 ≤ f < 3.499	F	150	16 ≤ f < 30	F	25
3.5 ≤ f < 4	F	90	30 ≤ f < 75	3rd	40
4 ≤ f < 7	F	60	75 ≤ f < 125	5th	70

*Please contact us for lower ESR

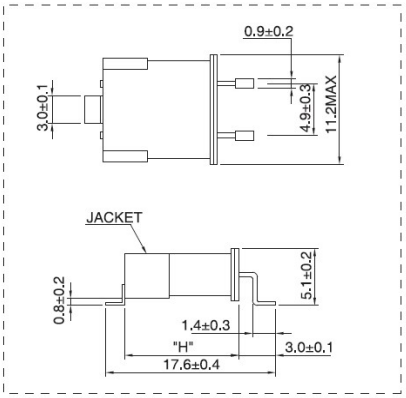
■ Dimensions (mm)



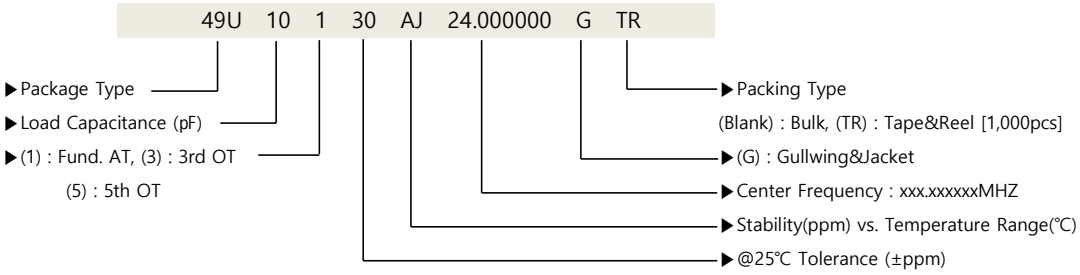
H	
HC-49U	13.46mm



● HC-49U Gullwing



■ Part Numbering Guide

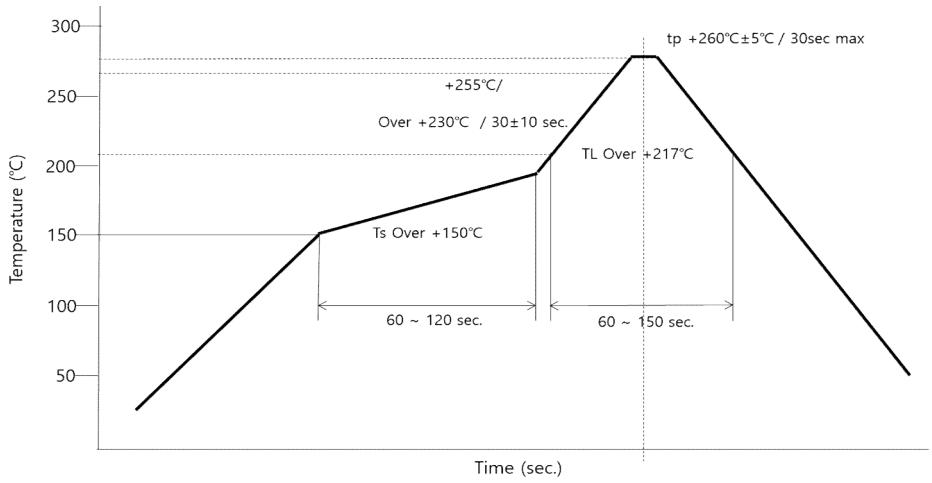


■ Frequency Stability vs. Temperature Range

Temp' vs Stability		±10ppm	±15ppm	±20ppm	±25ppm	±30ppm	±50ppm	±100ppm	±150ppm
		J	K	L	M	N	O	P	Q
-10 ~ 60℃	A	◎	◎	◎	◎	◎	◎	◎	◎
-10 ~ 70℃	B	◎	◎	◎	◎	◎	◎	◎	◎
-20 ~ 70℃	C	◎	◎	◎	◎	◎	◎	◎	◎
-30 ~ 70℃	D		◎	◎	◎	◎	◎	◎	◎
-30 ~ 85℃	E		◎	◎	◎	◎	◎	◎	◎
-40 ~ 85℃	F		◎	◎	◎	◎	◎	◎	◎
-40 ~ 90℃	G					◎	◎	◎	◎
-40 ~ 105℃	H					◎	◎	◎	◎
-40 ~ 125℃	I					◎	◎	◎	◎
-40 ~ 150℃	J							◎	◎

*Please contact us for other specifications.

■ Recommendation reflow condition



(1) Reflow soldering heat resistance
Peak Temp. : 265℃, 30sec max.
Heating : 230℃ or higher, 40sec.
Preheating : 150~180℃, 120sec.
Reflow passage times : 2 times

(2) Manual soldering heat resistance
Pressing a soldering iron of 350℃ on the terminal electrode
Soldering touch time : 4sec.
Manual soldering times : 2 times