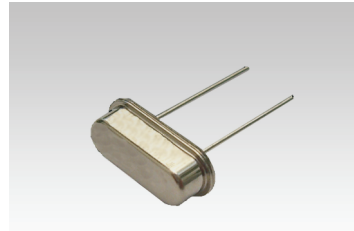




HC49US
Option: 3 Pin

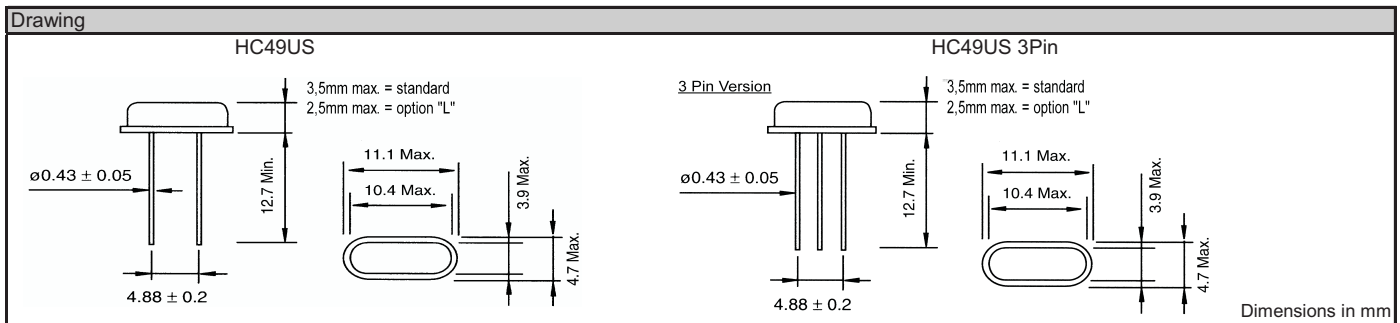
Features:

- Wide frequency range
- Low cost to performance
- Excellent for clock frequency generation
- Very low profile available



Specifications				
		Symbol	HC49US	Remarks
Frequency range		f	3.2MHz ~ 40.000MHz 30.000MHz ~ 90.000MHz	Fundamental mode Overtone mode
Frequency tolerance, Ta=25°C		$\Delta f/f$	$\pm 3\text{ppm} \sim \pm 50\text{ppm}$	Please specify
Load capacitance		C_L	5pF ~ 50pF or series	Please specify
Temperature tolerance		$\Delta f/f$	$\pm 3\text{ppm} \sim \pm 50\text{ppm}$	Please specify
Temperature range	Storage temp.	T_{STG}	-40°C ~ +105°C	
	Operating temp.	T_{OPR}	0°C ~ +70°C / -40°C ~ +105°C	Others are offered
Drive level	Maximum drive level	M_{DL}	1000 μ W	
	Recommended drive level	R_{DL}	10 μ W ~ 100 μ W	
Series resistance		R_1	As per table	25°C $\pm 3^\circ\text{C}$
Shunt capacitance		C_0	7pF	Max
Insulation resistance		I_R	500M Ohm	Min
Aging		Δf_A	$\pm 5\text{ppm/Year max}$	Others are offered

Resistance of series resonance (ESR)					
Frequency (MHz)	Mode	Ohm max	Frequency (MHz)	Mode	Ohm max
3.570 <= f < 3.999	Fundamental	140	8.000 <= f < 9.999	Fundamental	70
4.000 <= f < 4.999	Fundamental	110	10.000 <= f < 14.999	Fundamental	50
5.000 <= f < 5.999	Fundamental	90	15.000 <= f < 35.000	Fundamental	35
6.000 <= f < 7.999	Fundamental	80	30.000 <= f < 90.000	3rd OT	70



Order key								
Q	- 10.000000M	- HC49US	- F	- 30	- 50	- D	- 30	- I
Part	Frequency	Package	Mode of oscillation	Frequency tolerance	Temperature tolerance	Temperature range	Load capacitance	Option
Q=Quartz	M=MHz	HC49US	F=fund. 3=3.OT	$\pm\text{ppm}$ (25°C)	$\pm\text{ppm}$ (Temp. range)	A= 0°C ~ +70°C B= -10°C ~ +60°C C= -10°C ~ +70°C D= -20°C ~ +70°C E= -40°C ~ +85°C F= -40°C ~ +105°C H= -20°C ~ +80°C I = -10°C ~ +50°C	pF SR=series	3P=3Pin version L=Low high TA=Taped ammpack I=Isolation washers X=Special options