

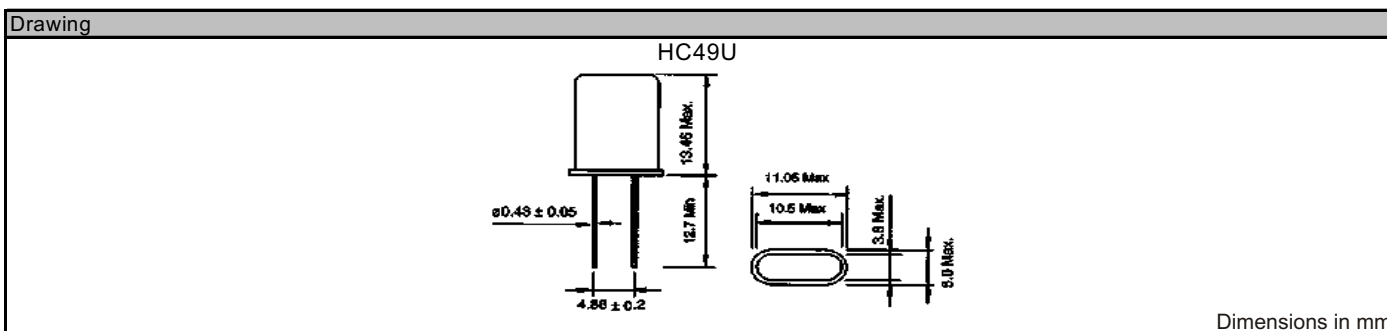
HC49U

Features:

- Industry standard packages
- Wide frequency range
- Low ESR

Specifications				
		Symbol	HC49U	Remarks
Frequency range		f	1.000MHz ~ 40.000MHz	Fundamental mode
			20.000MHz ~ 180.000MHz	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 temperature	$T_{STG}$	-55°C ~ +125°C	
	Operating temperature	$T_{OPR}$	-20°C ~ +70°C	Others are offered
Drive level			0.01μW ~ 1000μW	
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		$\Delta f_A$	$\pm 5\text{ppm/Year max}$	Others are offered

Resistance of series resonance (ESR)						
Frequency (MHz)	Mode	Ohm max		Frequency (MHz)	Mode	Ohm max
1.0 < f <= 1.5	Fundamental	1000		15.0 < f <= 25.0	Fundamental	30
1.5 < f <= 1.8	Fundamental	750		20.0 < f <= 25.0	(3.OT)	70
1.8 < f <= 2.3	Fundamental	500		25.0 < f <= 35.0	(3.OT)	50
2.3 < f <= 3.0	Fundamental	400		35.0 < f <= 75.0	(3.OT)	40
3.0 < f <= 3.5	Fundamental	150		75.0 < f <= 100.0	(3.OT)	35
3.5 < f <= 4.5	Fundamental	90		100.0 < f <= 150.0	(5.OT)	100
4.5 < f <= 7.0	Fundamental	70		125.0 < f <= 180.0	(7.OT)	150
7.0 < f <= 15.0	Fundamental	40				



Order key								
Q	- 10.00000M	- HC49U	- 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	HC49U	F=fund. 3=3.OT 5=5.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 G=-40°C ~ 125°C H=-20°C ~ +80°C I=-10°C ~ +50°C	pF SR=series	3P=3Pin version MJ=Metal jacket TA=Taped ammpack I=Isolation washers X=Special options