

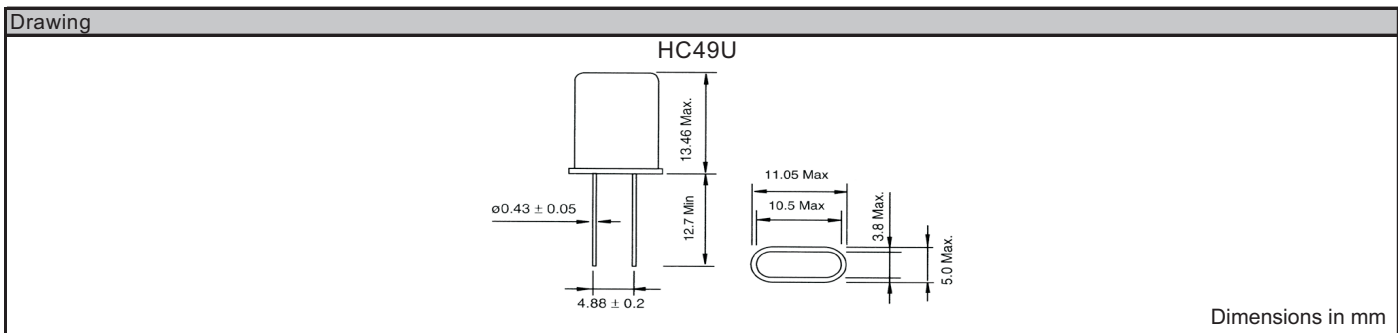
HC49U

Features:

- Industry standard packages
- Wide frequency range
- Low ESR

Specifications				
		Symbol	HC49U	Remarks
Frequency range		f	1.84320MHz ~ 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	10pF ~ 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}	-40°C ~ +85°C	Others are offered
Drive level			0.1mW ~ 1,0mW	
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
1.8<f<=2.3	Fundamental	600		15.0<f<=25.0	Fundamental	30
2.3<f<=3.0	Fundamental	500		20.0<f<=25.0	(3.OT)	70
3.0<f<=3.5	Fundamental	150		25.0<f<=35.0	(3.OT)	50
3.5<f<=4.5	Fundamental	90		35.0<f<=75.0	(3.OT)	40
4.5<f<=7.0	Fundamental	70		75.0<f<=100.0	(3.OT)	35
7.0<f<=15.0	Fundamental	40		100.0<f<=150.0	(5.OT)	100
				125.0<f<=180.0	(7.OT)	150



Order key								
Q	- 10.000000M	- 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 7=7.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 TR=Taped and reeled I=Isolation washers X=Special options