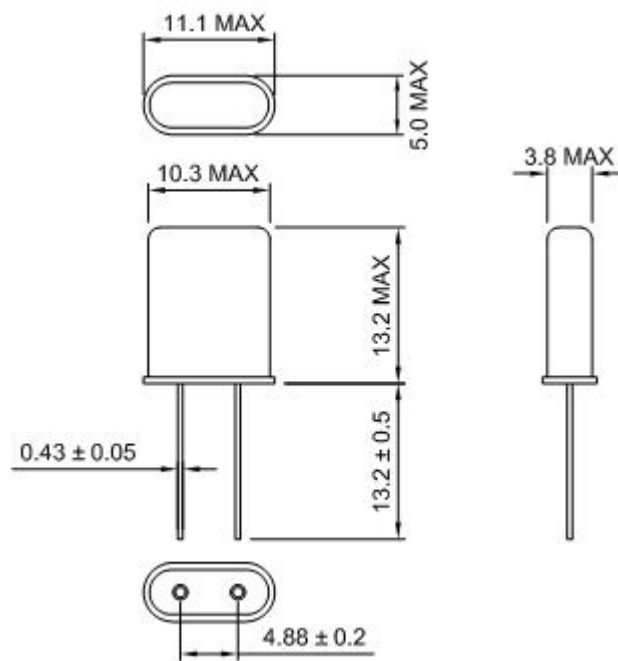


Quartz Crystal And Ceramic Resonator >> Quartz Crystal Unit Series

KLS14-HC-49U



## Electronic Specifications

Parameter	Symb	Units	Typical	Min	Max	Condition
Frequency Range	fo	MHz		1.8432	125.000	HC-49U
				8.000	200.00	HC-49T
Frequency Tolerance	$\Delta f/fo$	ppm	$\pm 30$	$\pm 10$	$\pm 50$	At 25°C
Temperature Stability	$\Delta f/fo$	ppm	$\pm 30$	$\pm 10$	$\pm 100$	At 25°C
Operating Temperature Range	T <sub>OPR</sub>	°C	- 20 ~ + 70			
Storage Temperature Range	T <sub>STG</sub>	°C	- 45 ~ + 85			
Valent Series Resistance	R <sub>l</sub>	Ω	Please see the table below			
Shunt Capacitance	C <sub>o</sub>	pF			7	
Load Capacitance	C <sub>L</sub>	pF	30	10	Series	
Insulator Resistance		MΩ		500		DC100 ± 15V
Drive Level		mW			0.1	
Aging		ppm			± 5.0	At 25°C, per year

## Equivalent Series Resistance(ESR) and Mode of Operation(Mode)

Frequency Range	Max ESR(W)	Mode	Frequency Range	Max ESR(W)	Mode
1.8432MHz to 1.999MHz	500	Fundamental	8.000MHz to 12.999MHz	30	Fundamental
2.000MHz to 2.456MHz	450	Fundamental	13.000MHz to 49.999MHz	25	Fundamental
2.457MHz to 2.999MHz	350	Fundamental	24.000MHz to 49.999MHz	40	Fundamental
3.000MHz to 3.999MHz	90	Fundamental	50.000MHz to 124.999MHz	100	Third Overtone
4.000MHz to 4.999MHz	70	Fundamental	125.000MHz to 149.000MHz	90	Third Overtone
7.000MHz to 7.999MHz	50	Fundamental	150.000MHz to 200.000MHz	150	Seventh Overtone