

FEATURE

- 1 High Stability With Temperature
- 2 Wide Frequency Range
- 3 Low Cost to Performance
- 4 Standard and Moderate Precision Available
- 5 RoHS Compliant Standard

HC-49/U HC-49/T Series Resonator

GENERIC SPECIFICATION

ITEM		HC-49/U	HC-49/T	REMARK
Nominal Frequency Range		1.8MHz to 40.0MHz	3.5MHz to 40.0MHz	Fund. Mode / AT
		20.0MHz to 50.0MHz		Fund. Mode / BT
		25.0MHz to 180.0MHz		Overtone mode
Frequency tolerance @ 25°C		±10, ±20, ±30, ±50, ±100 ppm		Others are offered
Load Capacitance		8 pF to ∞pF for Fund. Mode		Please specify
		5 pF to ∞pF for Overtone Mode		
Frequency temperature characteristics		±5, ±10, ±15, ±20, ±30, ±50 ppm		Others are offered
Temperature Range	Storage Temp.	-55°C to +125°C		
	Operating Temp.	-10°C to +60°C		Others are offered
Drive Level		10uW to 100mW (Typical: 10uW)		Please specify
Equivalent Series Resistance		As Per Table		
Shunt Capacitance		7.0pF Max.		
Insulation Resistance		More than 500MΩ @ DC 100V		
Aging		Fist year ±5ppm		

* If you have special requirement or the requirement of appearance, please provide detail data to us.

i.e. Spurious, DLD, Pulling Range, C1, Q value

EQUIVALENT SERIES RESISTANCE (ESR)

TYPE FREQUENCY	MODE	ESR (Ω)	TYPE FREQUENCY	MODE	ESR (Ω)
1.8MHz≤Freq.<2.5MHz	Fund. / AT	500	20.0MHz≤Freq.<30.0MHz	Fund. / BT	40
2.5MHz≤Freq.<3.0MHz	Fund. / AT	300	30.0MHz≤Freq.≤50.0MHz	Fund. / BT	25
3.0MHz≤Freq.<4.0MHz	Fund. / AT	100	25.0MHz≤Freq.<48.0MHz	3 rd , Overtone	50
4.0MHz≤Freq.<6.0MHz	Fund. / AT	80	48.0MHz≤Freq.≤100.0MHz	3 rd , Overtone	40
6.0MHz≤Freq.<8.0MHz	Fund. / AT	50	75.0MHz≤Freq.≤125.0MHz	5 th , Overtone	70
8.0MHz≤Freq.≤40.0MHz	Fund. / AT	25	125.0MHz≤Freq.≤185.0MHz	7 th , Overtone	120

FREQ. TOLERANCE vs. LOAD CAPACITANCE

CL\ppm	±5	±7	±10	±15	±20
8pF	×	×	×	△	○
10pF	×	×	△	○	○
12pF	×	△	△	○	○
16pF	×	△	○	○	○
≥18pF	△	○	○	○	○

FREQ. STABILITY vs. TEMP. RANGE

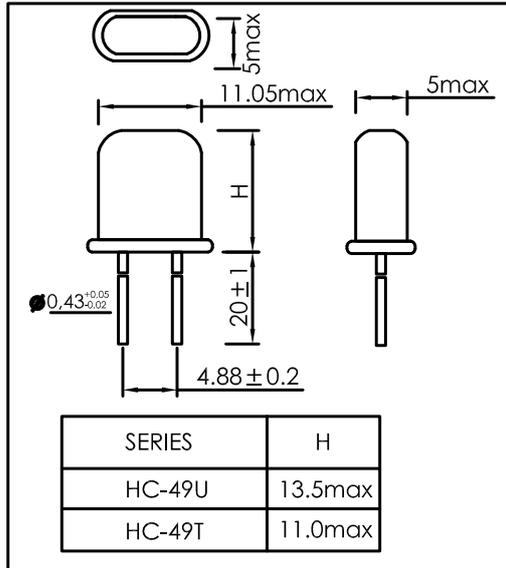
Temp.\ppm	±2.5	±5	±7	±10	±15	±20
0°C to +50°C	△	△	○	○	○	○
-10°C to +60°C	×	△	△	○	○	○
-20°C to +70°C	×	×	△	△	○	○
-40°C to +85°C	×	×	×	△	△	○

× Not Available △ Available (Case by case) ○ Standard



MECHANICAL DIMENSIONS (mm)

- HC-49U HC-49T



- Recommended reflow soldering standard conditions

