

# HC-49/U

## Features

- AT-cut crystal performance.
- Low profile for close PCB stacking.
- Standard and moderate precision available.



RoHS Compliance

## Specifications

Holder Type		Unit
Freq. Range	1.843200~27.000000 (Fund)	MHz
	27.000000~70.000000(3 <sup>rd</sup> O/T)	MHz
Storage Temp	-55~+125	°C
Drive Level	Maximum	1000 $\mu$ W
	Recommended	10~100 $\mu$ W
Shunt Capacitance	7 Max	pF
Insulation Resistance	500M Min	$\Omega$
Aging	$\pm$ 3.0	ppm/year

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

## Equivalent Series Resistance (E.S.R)

TYPE FREQUENCY	Mode	E.S.R
1.8432MHZ $\leq$ Freq. $\leq$ 3.0MHz	Fund	800 $\Omega$
3.0MHz < Freq. < 3.5MHz		150 $\Omega$
3.5MHz $\leq$ Freq. < 5.0MHz		100 $\Omega$
5.0MHz $\leq$ Freq. < 7.0MHz		60 $\Omega$
7.0MHz $\leq$ Freq. < 10.0MHz		50 $\Omega$
10.0MHz $\leq$ Freq. < 20.0MHz		30 $\Omega$
20.0MHz $\leq$ Freq. < 27.0MHz		30 $\Omega$
27.0MHz $\leq$ Freq. < 70.0MHz	3 <sup>rd</sup> O/T	60 $\Omega$

## Freq. Stability vs Temp. Range

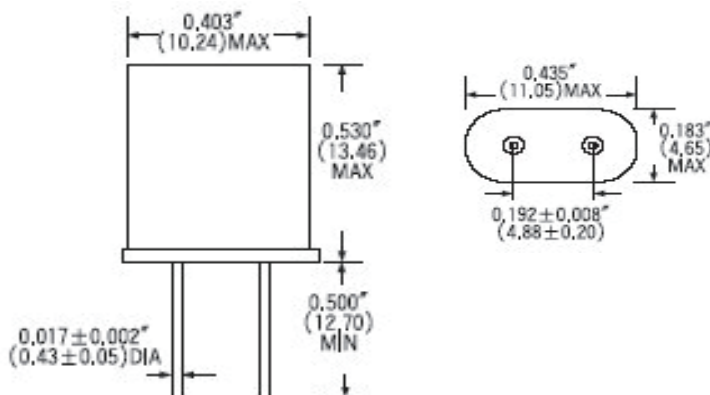
°C \ ppm	$\pm$ 10	$\pm$ 15	$\pm$ 20
-10~+60	○	○	○
-20~+70	△	○	○
-40~+85	X	X	○

## Freq. Stability vs. CL

Pf \ Ppm	$\pm$ 10	$\pm$ 15	$\pm$ 20	$\pm$ 30
8	X	△	○	○
10	X	△	○	○
12	△	○	○	○
16	△	○	○	○
Series	○	○	○	○

○:Standard △:Available(case by case) X:Not available

## DIMENSION (mm)



## OPTIONS

- Third lead
- Mylar spacer