

- Low-cost, industry-standard crystal unit
- AT-Cut strip crystal with hermetically sealed can
- Frequency range 1.0MHz to 70MHz
- Package height options available



## DESCRIPTION

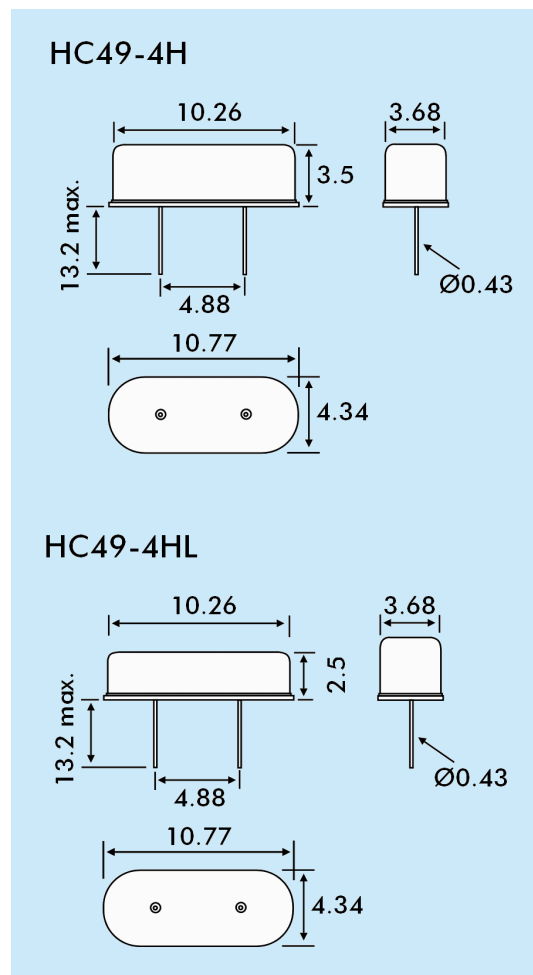
HC49-4H crystals share the same base outline as the industry-standard HC49 crystal. The crystal uses an AT-cut strip crystal with a hermetically sealed can. HC49-4H crystals provide a low cost source of system clock frequency.

## SPECIFICATION

Frequency Range:	3.2MHz to 70.0MHz
Oscillation Mode	
AT-Cut Fundamental:	3.2MHz to 30.0MHz
BT-Cut Fundamental:	24.0MHz to 48.0MHz
AT-Cut 3rd Overtone:	27.0MHz to 70.0MHz
Calibration Tolerance at 25°C	
AT-Cut:	±30ppm (tolerance to ±10ppm is available.)
BT-Cut:	±30ppm
Frequency Stability	
AT-Cut:	±30ppm over -10° to +60°C (Stability to ±10ppm is available)
BT-Cut:	±100ppm over -10 to +60°C
Load Capacitance (CL):	Series or from 8pF to 32pF
Ageing at 25°C:	±3ppm maximum, 1st year, ±1ppm per year thereafter.
Drive Level:	100µWatts typ., 500µWatts max.
Storage Temperature Range:	-50° to +105°C
Crystal Holder:	Resistance-weld hermetic seal
RoHS Status:	Compliant
Supply format:	Bulk pack (Radial tape and reel is available)

## ESR and OSCILLATION MODE

Frequency Range MHz	Crystal Cut Osc. Mode	ESR Ohms Max.
3.2 ~ 3.4	AT-Fund	300
3.5 ~ 6.0	AT-Fund	120
6.1 ~ 10.0	AT-Fund	60
10.1 ~ 30.0	AT-Fund	40
24.0 ~ 48.0	BT-Fund	40
27.0 ~ 30.0	AT-3rd OT	150
30.1 ~ 50.0	AT-3rd OT	100
50.1 ~ 70.0	AT-3rd OT	80



## PART NUMBER GENERATION

Part numbers for HC49-4H crystals are generated as follows:

Example:

8.000MHz HC49-4H/30/50/-20+70/30pF/30R

Frequency / holder / calibration tolerance / stability over op. temp. / op. temp. range / circuit condition / ESR or operating mode