HC49/4H CRYSTALS

DESCRIPTION

HC49/4H crystals share the same base dimensions as the industry-standard HC49 crystal but with a low profile can. The crystal utilizes an AT-cut strip crystal with a hermetically sealed metal can. HC49/4H crystals provide a low-cost solution for many applications, particularly where PCB height is restricted.

FEATURES

- **Very low cost crystal**
- **Available with 3.5mm (standard) or 2.5mm height**
- **AT-cut strip crystal with hermetically sealed metal can**
- **Comprehensive Euroquartz stockholding**
- **Ideal crystal for height-limited PCBs**

GENERAL SPECIFICATION

Frequency Range:	3.2MHz to 70MHz
Oscillation Mode	
AT-cut Fundamental:	3.2MHz to 30.0MHz
BT-cut Fundamental:	24.0MHz to 48.0MHz
AT-cut Third Overtone:	27.0MHz to 70.0MHz
Calibration Tolerance at 25°C	
AT-cut:	±30ppm (Tolerance to ±10ppm is also available)
BT-cut:	±30ppm
Frequency stability over temperature	
AT-cut:	±30ppm over -10° to +60°C (Tolerance ±10ppm over -10° to +60°C is also available)
BT-cut:	±100ppm over-10° to +60°C
Load Capacitance:	8pF to 32pF or Series (Specify)
Ageing:	±3ppm max 1st year, ±1ppm max per year after
Drive level:	500mW max
Static capacitance (C0):	7pF maximum

OSCILLATION MODE & ESR

Frequency (MHz)	Crystal Cut/ Oscillation Mode	ESR (max) (Ohms)
3.2 ~ 3.4	AT Fund.	300
3.5 ~ 4.0	AT Fund.	150
4.1 ~ 4.9	AT Fund.	120
5.0 ~ 5.9	AT Fund.	100
6.0 ~ 8.9	AT Fund.	80
9.0 ~ 9.9	AT Fund.	60
10.0 ~ 12.9	AT Fund.	50
13.0 ~ 30.0	AT Fund.	40
24.0 ~ 40.0	BT Fund.	40
40.1 ~ 48.0	BT Fund.	30
30.1 ~ 50.0	AT 3rd.	100
50.1 ~ 70.0	AT 3rd.	80

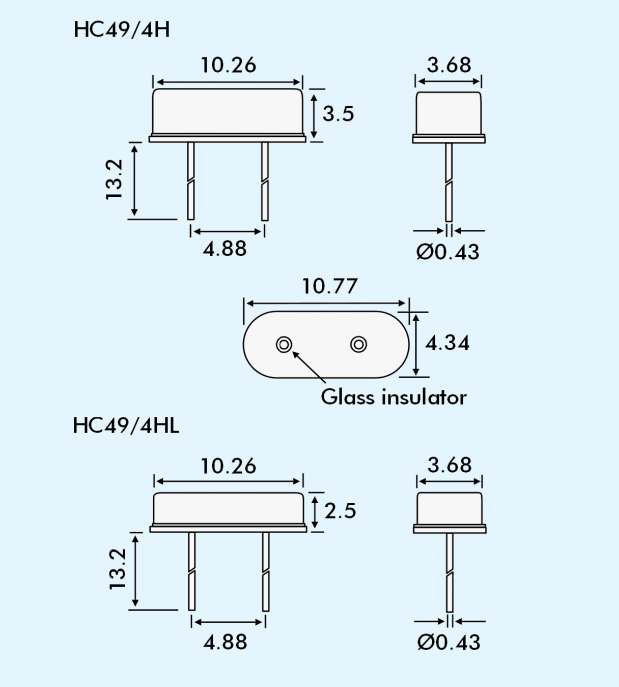
PART NUMBER GENERATION

HC49/4H crystal part numbers are derived as follows:

Example: **24.000MHz HC49/4H/30/50/10/30pF/ATF**

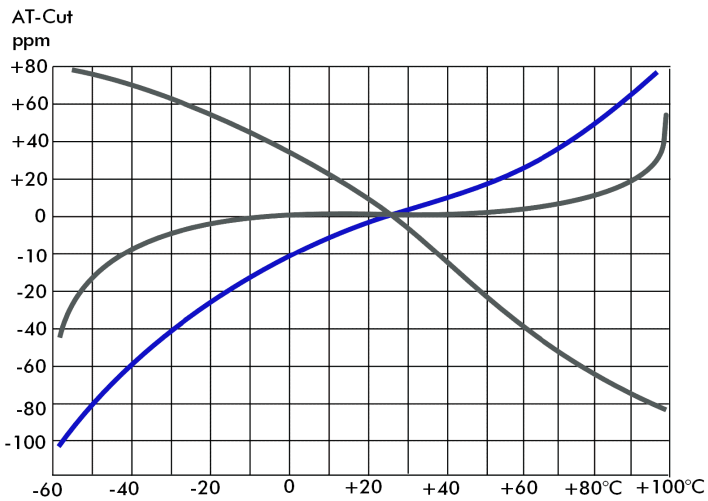
Frequency Holder/Calibration/Temp. Stability/ Temp. Range/Circuit

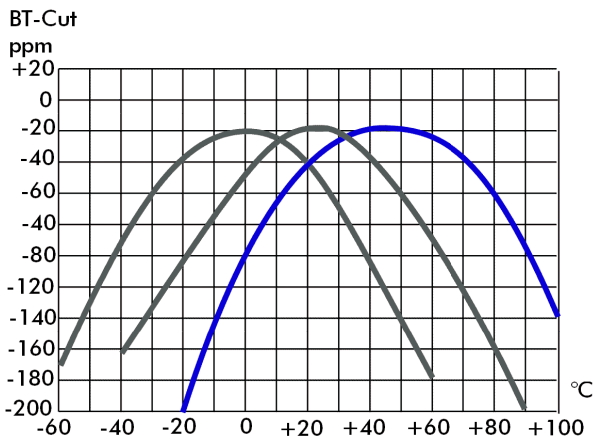
OUTLINES & DIMENSIONS



TEMPERATURE STABILITY

Sample curves for AT-cut and BT-cut strip crystals





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