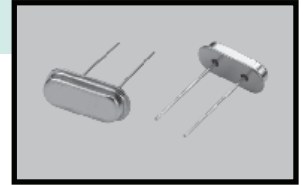


Quartz Crystal Resonator (MHz)

HC49/USAU

AUTOMOTIVE, AEC-Q200



General Description

The HC49/USAU is a metal package for AT Cut crystals with improvements specific for stressing applications

Features

Wide operating temperature range
Superior and reliable performance in harsh environment

Main applications

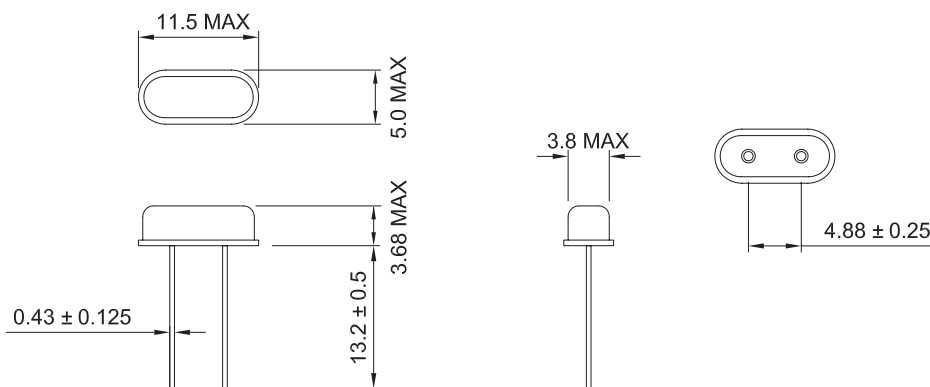
AUTOMOTIVE dashboard

Electrical characteristics

Item	Symbol	Values
Part number		HC49/USAU
Mode of vibration		Fund.
Frequency range	F	4 - 25 MHz
Frequency tolerance (@ +25°C)	$\Delta f/F$	$\pm 30\text{ppm}$ or specify
Frequency stability	$\Delta f/F$	$\pm 30\text{ppm}$ max
Operating temp. range	To	-40°C / +85°C
Storage temp. range	Ts	-40°C / +85°C
Load capacitance	Cl	12pF or specify
Equivalent serie resistance	ESR	see table 1
Drive level	P	typical 0.01mW , max 0.3mW
Reliability standard		AEC-Q200 Ver. C

Table 1	ESR
4 - 6 MHz	150Ω max
6 - 8 MHz	120Ω max
8 - 10 MHz	80Ω max
10 - 12 MHz	70Ω max
12 - 16 MHz	60Ω max
16 - 25 MHz	50Ω max

Dimensions



Remark : specifications subject to change without prior notice. Please confirm with our sales

Quartz Crystal Resonator (MHz)

HC49/USAU

Part Number Generator

HC49/USAU **10.000000** **F** **AT** **P120** **E** **F** **H** **TR** **xxx**
 0 1 2 3 4 5 6 7 8 9

0 : Holder
 HC49/USAU

1 : Frequency (MHz)
 □□□.□□□□□□
 max 10 digits including comma

2 : Vibration mode
 F = Fund.

3 : Cut
 AT

4 : Load capacitance
 S=Serie
 P20=20pF
 P30=30pF
 etc

5 : Tolerance
 A= $\leq \pm 30$ ppm
 C= $\leq \pm 20$ ppm

6 : Op. temp. range
 N=-40/+85

7 : Stability
 A1 < ± 100 ppm
 A < ± 50 ppm
 D < ± 30 ppm

8 : Packing
 TR = Tape & Reel

9 : Customized code
 Note : factory use

