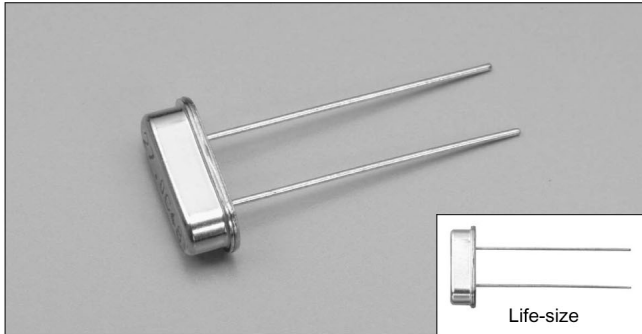


# AT-CUT CRYSTAL UNIT (Metal-can Type)

RoHS Compliant Optional

## HC49US

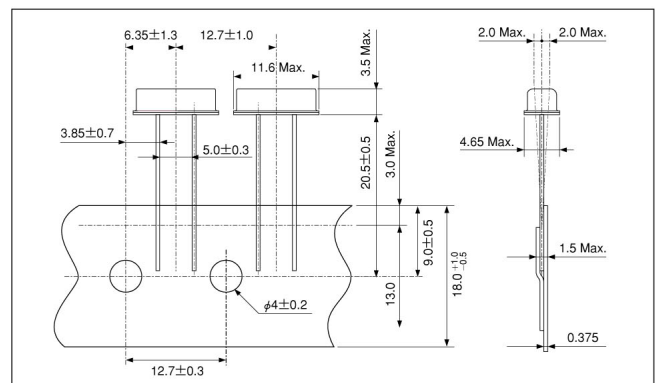
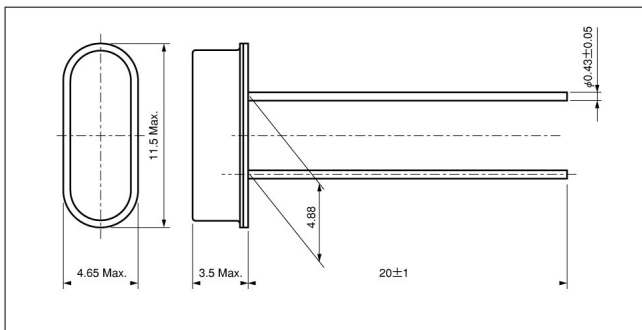


### FEATURES

- High performance miniature crystal units with Citizen's ultra-precise processing technology.
- Available in Tape and reel form.
- Suitable for various applications such as communication, AV, automotive and measurement devices.

Taping dimension : 2000pcs/Ammo pack [mm]

### DIMENSION [mm]



### STANDARD SPECIFICATIONS

| Item   | Model             | HC49US                           | Conditions                                     |
|--|-------------------|----------------------------------|--|
| Nominal Frequency                                    | f <sub>0</sub>    | 3.5MHz~30.0MHz (Fundamental)     | Need to contact us for the available frequency |
|  |                   | 30.001MHz~50.0MHz (3rd Overtone) |  |
| Frequency Tolerance                                  | Δf/f <sub>0</sub> | ±30ppm                           | at 25°C  |
| Frequency Tolerance over Operating Temperature Range | Δf/f <sub>0</sub> | ±50ppm                           | -10°C ~ +60°C                                  |
| Operating Temperature Range                          | T <sub>OPR</sub>  | -20°C ~ +70°C                    |  |
| Storage Temperature Range                            | T <sub>STR</sub>  | -40°C ~ +85°C                    |  |
| Motional (series) resistance                         | R <sub>1</sub>    | Refer to the following table     | at 25°C  |
| Load capacitance                                     | C <sub>L</sub>    | 18.0pF                           | Need to specify your requirement               |
| Shunt capacitance                                    | C <sub>0</sub>    | 7.0pF Max.                       |  |
| Level of drive                                       | DL                | 100 μW Max.                      |  |
| Insulation Resistance                                | I <sub>R</sub>    | 500MΩ Min.                       | DC100V±15V                                     |
| Aging (first year)                                   | Δf/f <sub>0</sub> | ±5ppm Max.                       | 25°C ±3°C                                      |

### MOTIONAL (SERIES) RESISTANCE (R<sub>1</sub>)

| Frequency Range | 3.5MHz ≤ f <sub>0</sub> < 4.0MHz | 4.0MHz ≤ f <sub>0</sub> < 6.0MHz | 6.0MHz ≤ f <sub>0</sub> < 10MHz | 10MHz ≤ f <sub>0</sub> < 14MHz | 14MHz ≤ f <sub>0</sub> < 30MHz | 30MHz ≤ f <sub>0</sub> < 36MHz | 36MHz ≤ f <sub>0</sub> ≤ 50MHz |
|-----------------|----------------------------------|----------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Mode            | Fundamental                      | Fundamental                      | Fundamental                     | Fundamental                    | Fundamental                    | 3rd Overtone                   | 3rd Overtone                   |
| R <sub>1</sub>  | 200Ω Max.                        | 150Ω Max.                        | 100Ω Max.                       | 80Ω Max.                       | 50Ω Max.                       | 140Ω Max.                      | 100Ω Max.                      |