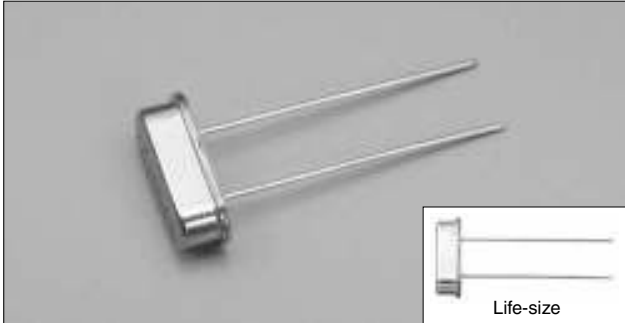


AT-CUT CRYSTAL UNIT (Metal-can Type)

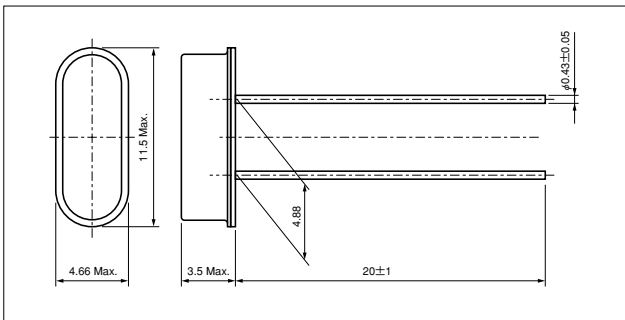
RoHS compliant **HC-49/U-S**



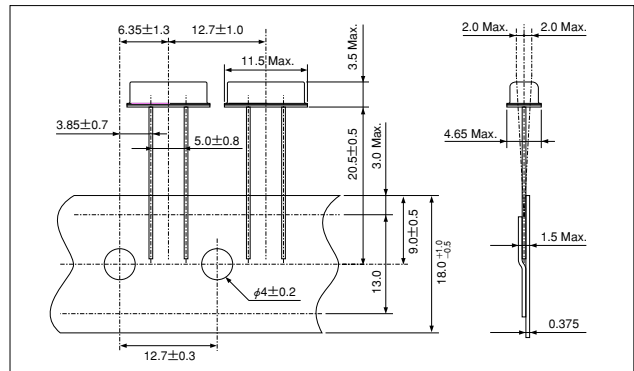
FEATURES

- Available in Tape and reel form.
- Suitable for various applications such as communication devices, AV devices and measuring instruments.

DIMENSION [mm]



Taping dimension : 2000pcs/Ammo pack [mm]



STANDARD SPECIFICATIONS

| Item | Model | HC-49/U-S | Conditions |
|--|------------------|---|--|
| Nominal Frequency | f ₀ | 3.5MHz~30.0MHz (Fundamental) | Need to contact us for the available frequency |
| | | 30.0MHz~50.0MHz (3rd Overtone) | |
| Frequency Tolerance | $\Delta f/f_0$ | ±30ppm | at 25°C |
| Frequency Tolerance over Operating Temperature Range | $\Delta f/f_0$ | below 6.0MHz: ±50ppm | -10°C~+60°C |
| | | above 6.0MHz: ±30ppm | |
| Operating Temperature Range | T _{OPR} | -20°C~+70°C | |
| Storage Temperature Range | T _{STR} | -40°C~+85°C | |
| Motional (series) resistance | R ₁ | Refer to the following table | at 25°C |
| Load capacitance | C _L | Fundamental:10.0pF~∞ 3rd Overtone:5.0pF~∞ | Need to specify your requirement |
| Shunt capacitance | C ₀ | 7.0pF Max. | |
| Level of drive | DL | 100 μW | |
| Insulation Resistance | I _R | 500MΩ Min. | DC100V±15V |
| Aging (first year) | $\Delta f/f_0$ | ±5ppm Max. | 25°C±3°C |

MOTIONAL (SERIES) RESISTANCE (R₁)

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