

Quartz Crystal Units

N49U (HC-49U)

[10.7×4.5×13.2 mm]

Thru-hole Type

Oscillation Mode

Fund. /3rd O.T. /5th O.T.

Tolerance

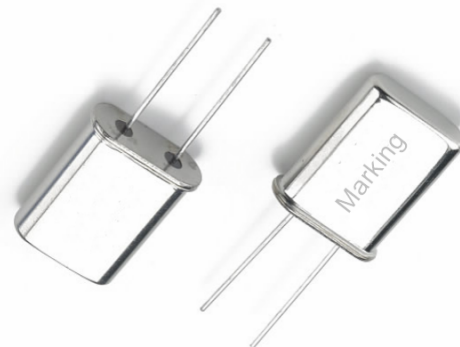
±10ppm ~ ±50ppm

Frequency Range

1MHz~150MHz

Features

- Resistance welded type crystal units
- Wide frequency range from 1MHz to 150MHz
- Lower cost and highly mass production capability
- High stability and reliability with temperature
- Ideal for large pullability application
- Applications: TV, STB, LCDM, Data communication, CPU, Memory, Cable modem, etc.
- RoHS Compliant / Pb-Free



Standard Specifications

| Item / Type | N49U (10.7×4.5×13.2 mm) |
|-------------------------------|-------------------------------------|
| Frequency Range | 1~150 MHz(Fund. /3rd /5th) |
| Load Capacitance | 8pF~32pF, or specify |
| Drive Level | 100 μW typical (500 μW max.) |
| Frequency Tolerance (at 25°C) | ± 10ppm, ±20ppm, ±30ppm, or specify |
| Aging | ±5ppm / Year (max.) |
| Storage Temperature Range | -55°C~+125°C |

ESR (Equivalent Series Resistance)

| Fundamental | | 3rd Overtone | | 5th Overtone | |
|-----------------|------------|-----------------|-----------|-----------------|-----------|
| Frequency Range | E.S.R | Frequency Range | E.S.R | Frequency Range | E.S.R |
| 1~3MHz | 350 Ω max. | 20~25MHz | 50 Ω max. | 70~100MHz | 40 Ω max. |
| 3~3.5MHz | 150 Ω max. | 25~30MHz | 40 Ω max. | 100~125MHz | 60 Ω max. |
| 3.5~4MHz | 90 Ω max. | 30~75MHz | 40 Ω max. | 125~150MHz | 80 Ω max. |
| 4~7MHz | 60 Ω max. | 75~100MHz | 60 Ω max. | | |
| 7~15MHz | 35 Ω max. | | | | |
| 15~30MHz | 25 Ω max. | | | | |

Frequency stability Vs Operating temperature range

| Temp. (°C) | ppm | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|
| | ±5 | ±10 | ±15 | ±20 | ±25 | ±30 | ±50 |
| -10~+60 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| -20~+70 | ▲ | ○ | ○ | ○ | ○ | ○ | ○ |
| -40~+85 | × | ▲ | ○ | ○ | ○ | ○ | ○ |

▲: Conditional
○: Available
×: Not available

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Outline Dimensions (Unit: mm)

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