



Resistance Welded Holder Type Crystal Unit



The XT49U series is an industry standard AT cut crystal housed in a HC-49U package. It is our standard resistance weld type quartz crystal.

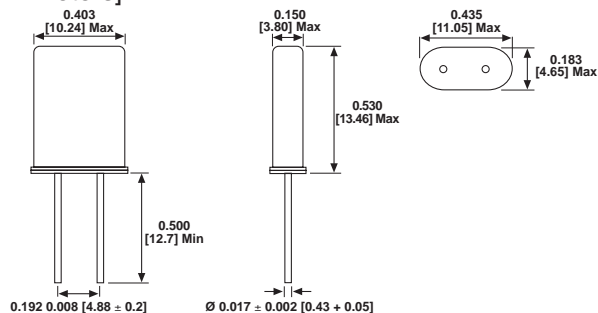
FEATURES

- Low cost
- Industry standard
- Excellent aging
- Wide frequency range
- 'AT' cut crystal

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|-------------------|--------------------|------|--------|---------|--------|
| PARAMETER | SYMBOL | CONDITION | UNIT | MIN | TYPICAL | MAX |
| Frequency Range | F _O | | MHz | 1.8432 | | 125 |
| Frequency Tolerance | ΔF/F _O | at 25°C | ppm | ± 10 | ± 30 | ± 50 |
| Temperature Stability | TC | ref to 25°C | ppm | ± 10 | ± 30 | ± 50 |
| Operating Temperature Range | T _{OPR} | | °C | - 20 | | + 70 |
| Storing Temperature Range | T _{STG} | | °C | - 40 | | + 85 |
| Shunt Capacitance | C _O | | pF | | | 7 |
| Load Capacitance | CL | Customer Specified | pF | 10 | | Series |
| Insulator Resistance | IR | 100V _{DC} | MΩ | 500 | | |
| Drive Level | DL | | μW | | 100 | 500 |
| Aging | Fa | at 25°C, per year | ppm | - 5.0 | | + 5.0 |

| EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE) | | | | | |
|---|-------------|-------------|-----------------------|-------------|--------------------------|
| FREQUENCY RANGE (MHZ) | MAX ESR (Ω) | MODE | FREQUENCY RANGE (MHZ) | MAX ESR (Ω) | MODE |
| 1.8432 to 1.999 | 650 | Fundamental | 6.000 to 7.999 | 50 | Fundamental |
| 2.000 to 2.999 | 500 | Fundamental | 8.000 to 12.999 | 35 | Fundamental |
| 3.000 to 3.499 | 250 | Fundamental | 13.000 to 32.000 | 25 | Fundamental |
| 3.500 to 3.999 | 150 | Fundamental | 24.000 to 29.999 | 60 | 3 rd Overtone |
| 4.000 to 4.999 | 100 | Fundamental | 30.000 to 79.999 | 40 | 3 rd Overtone |
| 5.000 to 5.999 | 80 | Fundamental | 80.000 to 125.000 | 90 | 5 th Overtone |

DIMENSIONS in inches [millimeters]



| ORDERING INFORMATION | | | | |
|----------------------|--|--|--|---------------|
| XT49U MODEL | R | - 20 | SP | 4M |
| | OTR | LOAD | OPTIONS | FREQUENCY/MHz |
| | Blank = Standard R = - 40°C to + 85°C | Blank = Series - 16 = 16pF - 20 = 20pF - 30 = 30pF - 32 = 32pF | Blank = Standard SL = Sleeve SP = Spacer | |