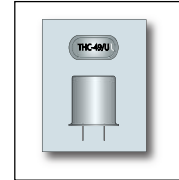


THC-49/U Crystal Resonator



FEATURES:

**Thru-Hole and Gull-wing
Low Frequency**

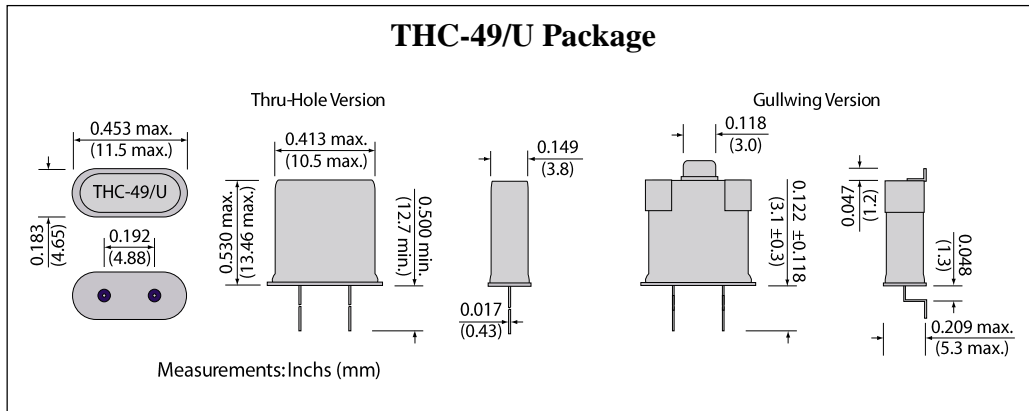
**Low Cost
13.46 x 11.5 x 4.65 mm**

| Parameter | Unit | Min. | Typ. | Max. |
|-------------------------------------|------|-----------|------|---------|
| Frequency Range (FR) | MHz | 1.7000 | - | 160.000 |
| Operating Temperature Range | °C | See Table | | |
| Frequency Tolerance at 25°C | ppm | ±10 | ±20 | ±50 |
| Frequency Stability | ppm | See Table | | |
| Load Capacitance (C _L) | pF | 6 | - | Series |
| Shunt Capacitance (C ₀) | pF | - | - | 7 |
| Equivalent Series Resistance (R) | Ohms | See Table | | |
| Drive Level | µW | | 100 | 1000 |
| Aging per year | ppm | - | ±3.0 | ±5.0 |
| Storage Temperature Range | °C | -40 | - | +85 |

| Frequency (MHz) | ESR (Ohms) max. |
|--------------------------|-----------------|
| Fundamental Mode | |
| 1.7000 to 2.000 | 600 |
| >2.000 to 3.000 | 500 |
| >3.000 to 3.500 | 150 |
| >3.500 to 4.000 | 120 |
| >4.000 to 5.000 | 100 |
| >5.000 to 6.000 | 80 |
| >6.000 to 7.000 | 60 |
| >7.000 to 8.000 | 50 |
| >8.000 to 10.000 | 40 |
| >10.000 to 13.000 | 30 |
| >13.000 to 30.000 | 25 |
| 3 rd Overtone | |
| >24.000 to 30.000 | 55 |
| >30.000 to 80.000 | 35 |
| 5 th Overtone | |
| >80.000 to 125.000 | 85 |
| 7 th Overtone | |
| >120.000 to 160.000 | 120 |

| Temperature | Stability (ppm) |
|--------------|------------------------------|
| -10 to +60°C | ±10, ±15, ±20, ±25, ±30, ±50 |
| -20 to +70°C | ±10, ±15, ±20, ±25, ±30, ±50 |
| -40 to +85°C | ±20, ±25, ±30 |

| Environmental | |
|--------------------|----------|
| Terminal Material | KOVAR |
| Terminal Plating | Sn-Ag-Cu |
| REACH Compliant | Yes |
| RoHS Compliant | Yes |
| RoHS Exemptions | No |
| Re-flow Temp. Max. | 260°C |
| MSL | 1 |



[Click To Quote](#)

Example Part Number: THC-49/U-D-E-16-18-25M576

| | | | | | | | | | | |
|----------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|-------------------------|
| THC-49/U | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> |
| | | 1 | | 2 | | 3 | | 4 | | 5 |
| | | Tolerance | | Stability | | Temp. Range | | Load Cap. | | Frequency |
| | | A = ±50 | | A = ±50 | | 16 = -10 to +60°C | | AA = Series | | Frequency in MHz |
| | | B = ±30 | | B = ±30 | | 27 = -20 to +70°C | | xx = Load | | i.e. 25M456 |
| | | C = ±25 | | C = ±25 | | 48 = -40 to +85°C | | i.e. 16, 24, 32 | | use M for decimal point |
| | | D = ±20 | | D = ±20 | | | | | | |
| | | E = ±15 | | E = ±15 | | | | | | |
| | | F = ±10 | | F = ±10 | | | | | | |