

**Customer Part:**

**Description**

- Industry standard leaded package  
Resistance welded, hermetically sealed in an inert atmosphere, glass to metal seals on leads
- Model HC49/3.5H
- Model Issue number 15

**Frequency Parameters**

- Frequency 20.0MHz
- Frequency Tolerance  $\pm 30.00\text{ppm}$
- Tolerance Condition @ 25°C  $\pm 2^\circ\text{C}$
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range -20.00 to 70.00°C
- Overtone Order Fundamental
- Ageing  $\pm 5\text{ppm}$  typical per year @ 25°C

**Electrical Parameters**

- Load Capacitance (CL) 20.00pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 500µW max
- ESR 40.00Ω max

**Environmental Parameters**

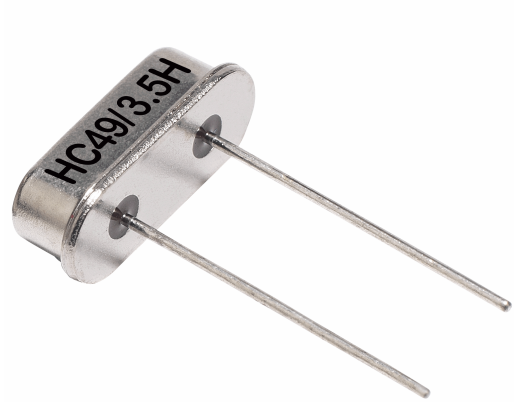
- Storage Temperature Range: -55 to 125°C
- Shock: 981m/s<sup>2</sup>, 6ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: 10Hz-60Hz, 0.75mm amplitude, 60Hz-500Hz, 98.1m/s<sup>2</sup>, 30mins in 3 mutually perpendicular planes

**Compliance**

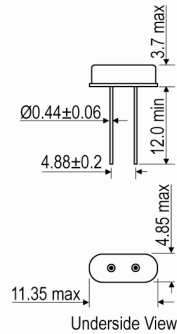
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

**Packaging Details**

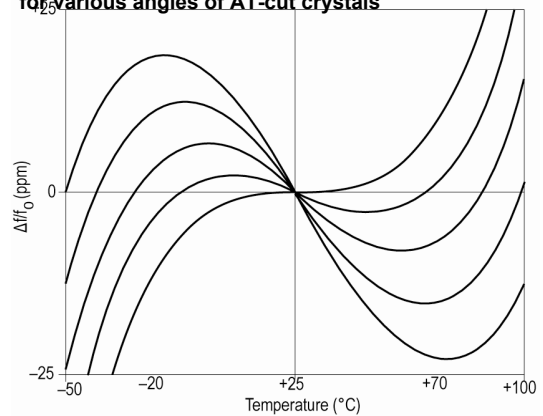
- Pack Style: Bulk Loose in bulk pack
- Pack Size: 100
- *Alternative packing option available*



**Outline (mm)**



**Typical Frequency vs Temperature Curves for various angles of AT-cut crystals**



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