

### 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 20.00MHz
- Frequency Tolerance  $\pm 20.00$ ppm
- Tolerance Condition @ 25°C  $\pm 2^\circ\text{C}$
- Frequency Stability  $\pm 30.00$ ppm
- Operating Temperature Range -10.00 to 70.00°C
- Overtone Order Fundamental
- Ageing  $\pm 5$ ppm typical per year @ 25°C

### Electrical Parameters

- Load Capacitance (CL) 20.00pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 500 $\mu$ W max
- ESR 40.00 $\Omega$  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

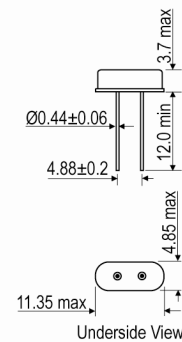
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JEDEC-STD-033): Not Applicable

### Packaging Details

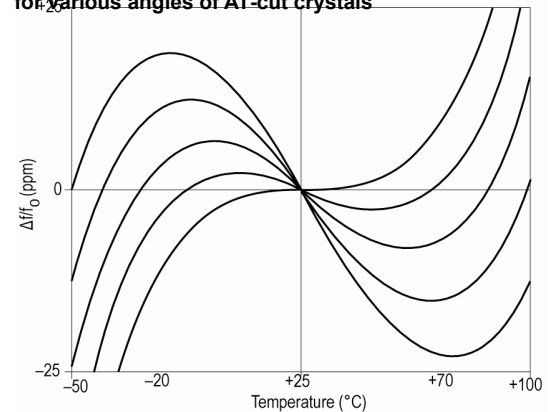
- Pack Style: Bulk Loose in bulk pack  
Pack Size: 100
- *Alternative packing option available*



### Outline (mm)



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



### Sales Office Contact Details:

UK: +44 (0)1460 270200

Germany: 0800 1808 443

France: 0800 901 383

USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)