

**Customer Part:**

**Description**

- Industry standard SMD crystal  
Resistance welded, hermetically sealed in an inert atmosphere,  
glass to metal seals on leads  
Lead wires are mounted onto a plastic former to create a gull  
wing mount
- Model HC49/4HSMX
- Model Issue number 17

**Frequency Parameters**

- Frequency 12.0MHz
- 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 -40.00 to 90.00°C
- Overtone Order Fundamental
- Ageing  $\pm 5\text{ppm typ per year @ } 25^\circ\text{C}$

**Electrical Parameters**

- Load Capacitance (CL) 30.00pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 500µW max
- ESR 40.00Ω max

**Environmental Parameters**

- 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
- Storage Temperature Range: -55 to 125°C
- RoHS Terminations
- RoHS Reflow Temp 260°C max for 10s max

**Compliance**

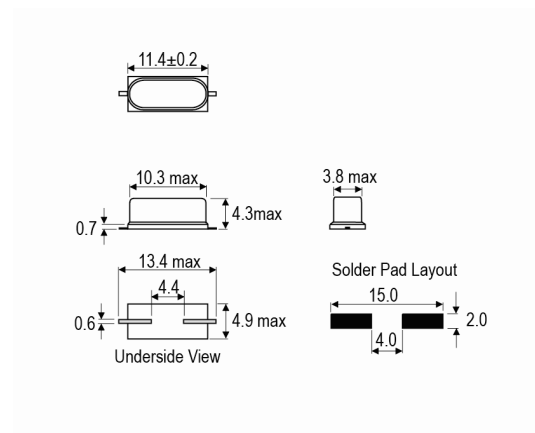
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

**Packaging Details**

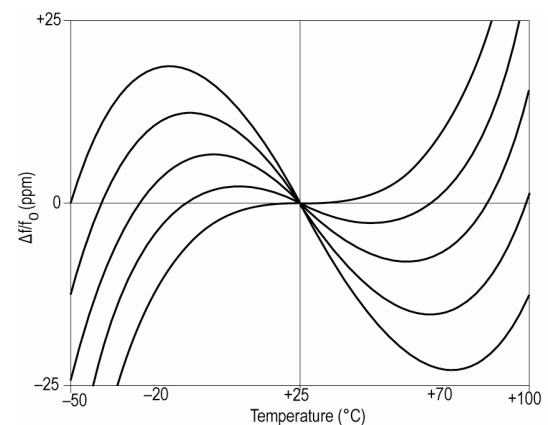
- Pack Style: Reel Tape & reel in accordance with EIA-481-D  
Pack Size: 1,000
- Alternative packing option available



**Outline (mm)**



**Typical Frequency vs Temperature Curves**



**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)