

ISSUE 15; July 2016

Description

- Industry standard leaded package
Resistance welded, hermetically sealed in an inert atmosphere, glass to metal seals on leads
Variants available include but are not limited to:-
3L = a centre mounted third leg grounds the can
- 3L 3 Lead

Frequency Parameters

- Frequency 3.2MHz to 100.0MHz
- Frequency Tolerance $\pm 10.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Tolerance Condition @ $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- Frequency Stability $\pm 15.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing $\pm 5\text{ppm}$ typical per year @ 25°C
- Ageing: $\pm 1\text{ppm}$ available on request

Electrical Parameters

- Load Capacitance (CL) 10.0pF to 75.0pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 500 μW max

Operating Temperature Ranges

- 0 to 50°C
- 10 to 60°C
- 20 to 70°C
- 30 to 80°C
- 40 to 85°C
- 55 to 105°C

Environmental Parameters

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

Ordering Information

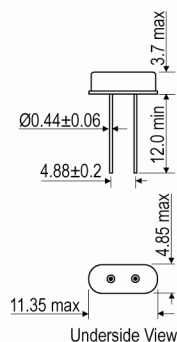
- Frequency*
Model*
Frequency Tolerance (@ 25°C)*
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Load Capacitance*
Overtone*
(*minimum required)
- Example:
10.0MHz HC49/3.5H
50/50/-40 to 85°C /10 FUND

Compliance

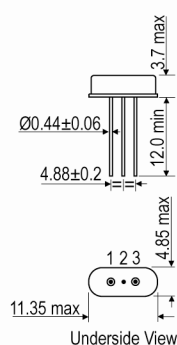
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm)



Outline (mm) -3L = 3 Lead



Pin Connections
1. Crystal
2. Case & GND
3. Crystal

Sales Office Contact Details:

UK: +44 (0)1460 270200
Germany: 0800 1808 443

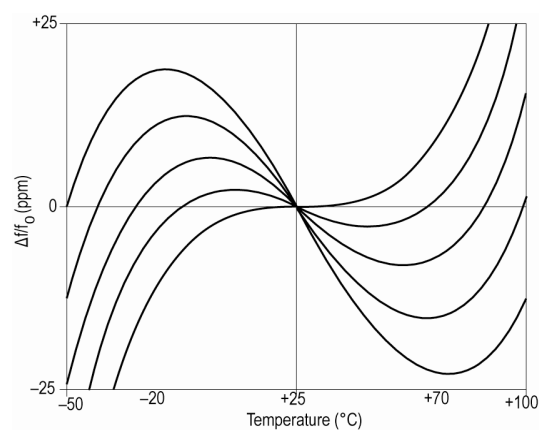
France: 0800 901 383
USA: +1.760.318.2824

Email: info@iqdfrequencyproducts.com
Web: www.iqdfrequencyproducts.com

Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-468-C
Pack Size: 1,000
- Pack Style: Bulk Loose in bulk pack
Pack Size: 100

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
Web: www.iqdfrequencyproducts.com

Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Over Tone Order	ESR
		°C	ppm		Ω
3.2MHz	3.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105	±15 ±20 ±20 ±25 ±30 ±100	Fundamental	300
4.0MHz	5.499999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105	±15 ±20 ±20 ±25 ±30 ±100	Fundamental	130
5.5MHz	7.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105	±15 ±20 ±20 ±25 ±30 ±100	Fundamental	60
8.0MHz	39.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105	±15 ±20 ±20 ±25 ±30 ±100	Fundamental	40
26.0MHz	100.0MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105	±15 ±20 ±20 ±25 ±30 ±100	3rd Overtone	100

*Stability Maximum values ±100ppm

This document was correct at the time of printing; please contact your local sales office for the latest version.

[Click to view latest version on our website.](#)

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
Web: www.iqdfrequencyproducts.com