

ISSUE 15; October 2021

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 500μW 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

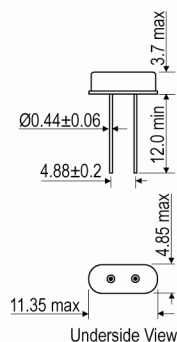
- Frequency*
- Model*
- Frequency Tolerance (@ 25°C)*
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Load Capacitance*
- Overtone*
- (*minimum required)
- Example:
10.0MHz HC49/3.5H
50/50/-40 to 85°C /10 FUND

Compliance

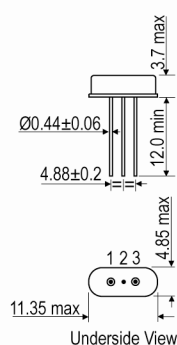
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



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

USA: +1.760 668 8935

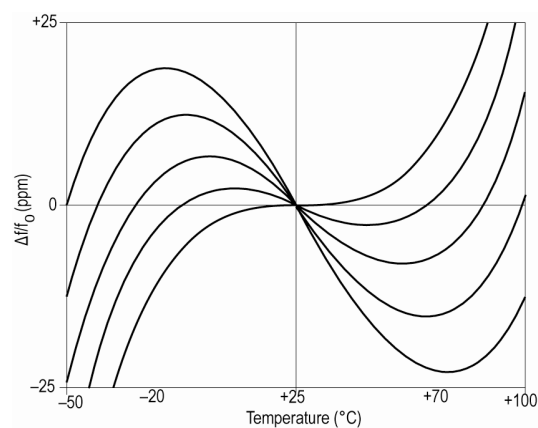
Email: info@iqdfrequencyproducts.com

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

USA: +1.760 668 8935

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	±15	Fundamental	300
		-10 to 60	±20		300
		-20 to 70	±20		300
		-30 to 80	±25		300
		-40 to 85	±30		300
		-55 to 105	±100		300
4.0MHz	5.499999MHz	0 to 50	±15	Fundamental	130
		-10 to 60	±20		130
		-20 to 70	±20		130
		-30 to 80	±25		130
		-40 to 85	±30		130
		-55 to 105	±100		130
5.5MHz	7.999999MHz	0 to 50	±15	Fundamental	60
		-10 to 60	±20		60
		-20 to 70	±20		60
		-30 to 80	±25		60
		-40 to 85	±30		60
		-55 to 105	±100		60
8.0MHz	39.999999MHz	0 to 50	±15	Fundamental	40
		-10 to 60	±20		40
		-20 to 70	±20		40
		-30 to 80	±25		40
		-40 to 85	±30		40
		-55 to 105	±100		40
26.0MHz	100.0MHz	0 to 50	±15	3rd Overtone	100
		-10 to 60	±20		100
		-20 to 70	±20		100
		-30 to 80	±25		100
		-40 to 85	±30		100
		-55 to 105	±100		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

USA: +1.760 668 8935

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com