

ISSUE 15; October 2015

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 = an additional centre mounted leg grounds the can
TW = an additional top mounted leg grounds the can
T = a truncated height of 11.1mm
Please see our HC49 Gull-Wing for a SMD alternative
Please contact our sales offices for more options

Frequency Parameters

- Frequency 1.8432MHz to 270.0MHz
- Frequency Tolerance $\pm 5.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Frequency Stability $\pm 5.00\text{ppm}$ to $\pm 200.00\text{ppm}$
- Ageing $\pm 3\text{ppm}$ typical per year

Electrical Parameters

- Load Capacitance 10.0pF to 75.0pF
- Shunt Capacitance 7pF max
- Drive Level 1mW 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
- 55 to 125°C

Environmental Parameters

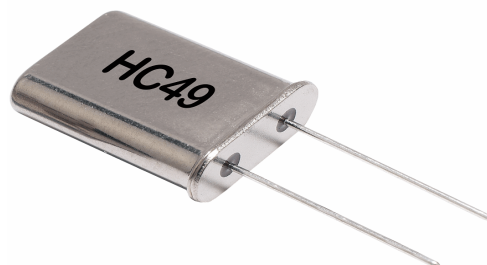
- Shock: 981m/s², 6ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: 10Hz-60Hz, 0.75mm amplitude, 60Hz-500Hz, 98.1m/s², 30mins in 3 mutually perpendicular planes
- Storage Temperature Range: -55 to 125°C

Ordering Information

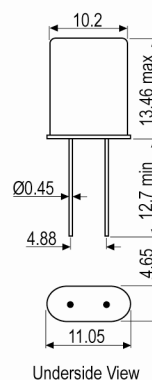
- Frequency*
- Model*
- Frequency Tolerance (@25°C)*
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Load Capacitance*
- Overtone*
- Example:
10.0MHz HC49
50/50/-40 to 85C/10 FUND

Compliance

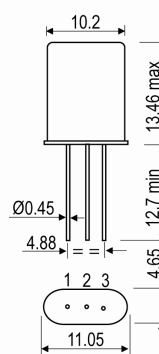
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



Outline (mm) Standard 2 leg HC49 package



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

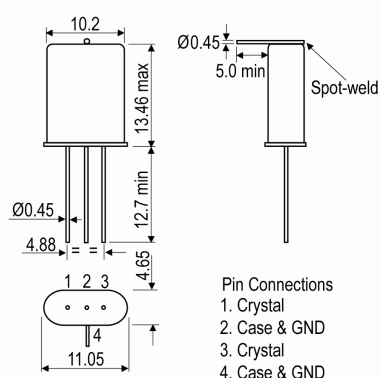
France: 0800 901 383
USA: +1 408.273.4530

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

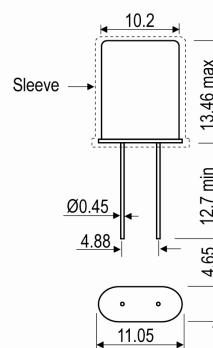
Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 100
- Pack Style: Ammo Tape & ammo in accordance with
Pack Size: 1,000 EIA-468-C
- Pack Style: Cutt In tape, cut from a reel
Pack Size: 10
- Pack Style: Reel Tape & reel in accordance with EIA-468-C
Pack Size: 1,000
- Pack Style: R250 Tape & reel in accordance with EIA-481-D
Pack Size: 250
- Pack Style: R500 Tape & reel in accordance with EIA-468-C
Pack Size: 500

Outline (mm) -3L/TW = 3 Lead and Top Wire



Outline (mm) -SL = Sleeve



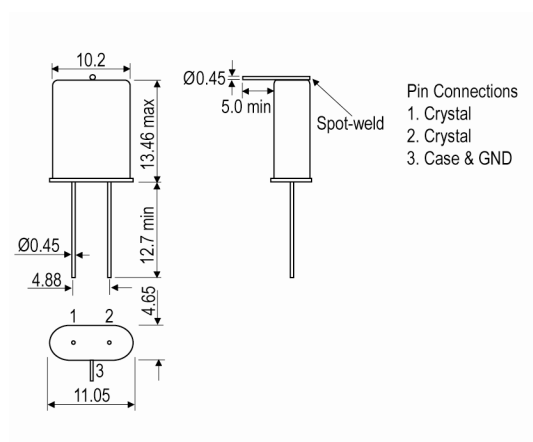
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Outline (mm) -TW = Top Wire



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Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability*	Over Tone Order	ESR
		°C	ppm		Ω
1.8432MHz	1.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	Fundamental	800
2.0MHz	2.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	Fundamental	600
3.0MHz	3.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	Fundamental	150
4.0MHz	6.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	Fundamental	100
7.0MHz	9.999999MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	Fundamental	50
10.0MHz	36.0MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	Fundamental	35
21.0MHz	90.0MHz	0 to 50 -10 to 60 -20 to 70	±15 ±20 ±20	3rd Overtone	40

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Frequency Min	Frequency Max	Temperature Range	Stability*	Over Tone Order	ESR
		°C	ppm		Ω
		-30 to 80 -40 to 85 -55 to 105 -55 to 125	±25 ±30 ±50 ±100		
60.0MHz	150.0MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±10 ±15 ±15 ±20 ±25 ±50 ±50	5th Overtone	70
85.0MHz	210.0MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±5 ±5 ±10 ±20 ±25 ±50 ±50	7th Overtone	100
110.0MHz	270.0MHz	0 to 50 -10 to 60 -20 to 70 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±5 ±5 ±10 ±20 ±25 ±50 ±50	9th Overtone	150

*Stability Maximum values ±200ppm

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