

ISSUE 14; April 2016

Description

- Resistance Welded enclosure with truncated height
- -3L 3 Lead
- -3L/SL 3 Lead and Sleeve
- -3L/TW 3 Lead and Top Wire
- -3L/TW/SL 3 Lead, Top Wire and Sleeve
- -SL Sleeve
- -SMD Surface Mount Device
- -TW Top Wire
- -TW/SL Top Wire and Sleeve

Frequency Parameters

- Frequency 4.0MHz to 270.0MHz
- Frequency Tolerance $\pm 5.00\text{ppm}$ to $\pm 100.00\text{ppm}$ @ 25°C
- Tolerance Condition @ 25°C
- Frequency Stability $\pm 15.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing $\pm 3\text{ppm}$ typical per year at 25°C

Electrical Parameters

- Load Capacitance (CL) 10.0pF to 75.0pF
- Shunt Capacitance (C0) 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

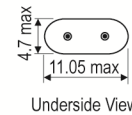
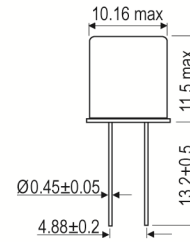
Ordering Information

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

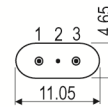
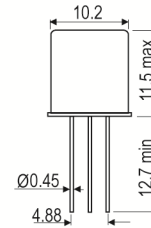
Compliance

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

Outline (mm)

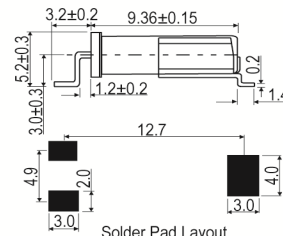
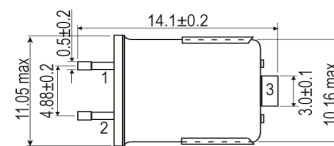


Outline (mm) -3L = 3 Lead



- Pin Connections
1. Crystal
 2. Case and GND
 3. Crystal

Outline (mm) -SMD = Surface Mount Device



- Pad Connections
1. Crystal
 2. Crystal
 3. Case & GND

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 and reel in accordance with
Pack Size: 1,000 EAI-481-C
- Pack Style: Ammo Ammo
Pack Size: 1,000
- Pack Style: Bulk Bulk
Pack Size: 100

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
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 -30 to 80 -40 to 85 -55 to 105 -55 to 125	±15 ±20 ±20 ±25 ±30 ±50 ±100	3rd Overtone	40
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	±15 ±20 ±20 ±25 ±30 ±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	±15 ±20 ±20 ±25 ±30 ±50 ±100	7th Overtone	100
110.0MHz	270.0MHz	0 to 50 -10 to 60 -20 to 70	±15 ±20 ±20	9th Overtone	150

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

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Over Tone Order	ESR
		°C	ppm		Ω
		-30 to 80	±25		
		-40 to 85	±30		
		-55 to 105	±50		
		-55 to 125	±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

France: 0800 901 383

Email: info@iqdfrequencyproducts.com

Germany: 0800 1808 443

USA: +1.760.318.2824

Web: www.iqdfrequencyproducts.com