

#### **ISSUE 17; July 2016**

#### Description

 Industry standard low cost SMD version of the HC49/4H 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

Low profile versions available please contact our sales offices for details

Stock parts available

#### **Frequency Parameters**

Frequency
Frequency Tolerance
Tolerance Condition
3.2MHz to 100.0MHz
±10.00ppm to ±100.00ppm
② 25°C ±2°C

Frequency Stability ±10.00ppm to ±500.00ppm
Ageing ±5ppm typ per year @ 25°C

#### **Electrical Parameters**

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

### **Operating Temperature Ranges**

■ -10 to 60°C

■ -20 to 70°C

■ -30 to 80°C

■ -40 to 85°C

-55 to 105°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\*

(\*minimum required)

Example

10.00MHz HC49/4HSMX 50/50/-40 to 85C/10 FUND

## Compliance

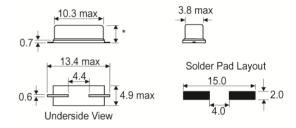
RoHS Status (2011/65/EU)
REACh Status
MSL Rating (JDEC-STD-033):
Not Applicable



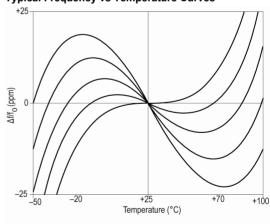
# Outline (mm)



\* Package Height Options HC49/4HSMX 4.3mm max HC49/3.5HSMX 3.7mm max HC49/3HSMX 3.1mm max HC49/2.5HSMX 2.85mm max



## **Typical Frequency vs Temperature Curves**



#### **Sales Office Contact Details:**

UK: +44 (0)1460 270200 France: 0800 901 383 Germany: 0800 1808 443 USA: +1.760.318.2824 Email: info@iqdfrequencyproducts.com Web: www.iqdfrequencyproducts.com



## Quartz Crystal Specification HC49/4HSMX

#### **Packaging Details**

Pack Style: Bulk Loose in bulk pack

Pack Size: 100

■ Pack Style: Cutt In tape, cut from a reel

Pack Size: 1

Pack Style: Reel Tape & reel in accordance with EIA-481-D

Pack Size: 1,000

## **Electrical Specification - maximum limiting values**

Frequency Min	Frequency Max	Temperature Range	Stability (min)*	Over Tone Order	ESR
	mux	°C	ppm		Ω
3.2MHz	3.999999MHz	-10 to 60	±10	Fundamental	300
		-20 to 70	±10		
		-30 to 80	±15		
		-40 to 85	±15		
		-55 to 105	±100		
4.0MHz	5.499999MHz	-10 to 60	±10	Fundamental	130
		-20 to 70	±10		
		-30 to 80	±15		
		-40 to 85	±15		
		-55 to 105	±100		
5.5MHz	7.999999MHz	-10 to 60	±10	Fundamental	60
		-20 to 70	±10		
		-30 to 80	±15		
		-40 to 85	±15		
		-55 to 105	±100		
8.0MHz	39.99999MHz	-10 to 60	±10	Fundamental	40
		-20 to 70	±10		
		-30 to 80	±15		
		-40 to 85	±15		
		-55 to 105	±100		
26.0MHz	100.0MHz	-10 to 60	±10	3rd Overtone	100
		-20 to 70	±10		
		-30 to 80	±15		
		-40 to 85	±15		
		-55 to 105	±100		

<sup>\*</sup>Stability Maximum values ±500ppm

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.

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