# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# Quartz Crystals DIP HC-49S 9B SERIES





## **Features**

- > Resistance welded type crystal units.
- > A great number of standard frequencies.
- > Higher frequency pullibility and lower equivalent series resistance.
- > Lower cost and highly mass production capability.
- > The best choice of TV, STB, LCDM and Cable Modem.
- > RoHS Compliant / Pb Free

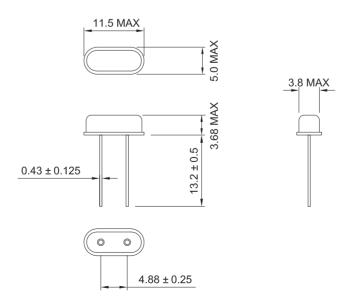
### **Electrical Specifications**

ltem / Type	9B	
Frequency Range	3.2 ~ 90 MHz	
Frequency Tolerance (at 25 °C)	± 10 ppm, or specify	
Frequency Stability Over Operating Temperature Range	± 10 ppm (- 20 ~ +70 °C), or specify	
Operating Temperature Range	- 20 ~ +70 °C	
Shunt Capacitance (C0)	7 pF Max.	
Drive Level	.evel 1 ~ 500 μW (100 μW typical)	
Load Capacitance	18 pF, or specify	
Aging (at 25 °C)	± 3 ppm / year Max.	
Storage Temperature Range	- 40 ~ + 85 °C	

#### Equivalent Series Resistance(ESR)

Fundamental		3rd Ove	3rd Overtone	
3.2 ~ 3.686 MHz	200 Ω Max.	27 ~ 30 MHz	100 Ω Max.	
3.686 ~ 5 MHz	150 Ω Max.	30 ~ 50 MHz	80 Ω Max.	
5 ~ 10 MHz	80 Ω Max.	50 ~ 90 MHz	60 Ω Max.	
10 ~ 14 MHz	40 Ω Max.			
14 ~ 30 MHz	30 Ω Max.			

#### **Dimensions**



Remark : Specification subject to change without prior notice. Please confirm with our sales.

Units:mm