

## DIP HC-49S / 9B SERIES

### ■ Features

- Resistance welded type crystal units.
- A great number of standard frequencies .
- High frequency pullability and low equivalent series resistance.
- Lower cost and highly mass production capacity.
- The best choice of PC, STB, LCDM, and Cable Modem.
- Lead free parts.



### ■ Electrical Specifications

Item	Type	9B
Frequency Range		3.2 ~ 90 MHz
Frequency Tolerance (at 25 °C)		± 30 ppm, or specify
Frequency Stability Over Operating Temperature Range		± 30 ppm, or specify
Operating Temperature Range		-10 ~ +60 °C, or specify
Shunt Capacitance (C0)		7 pF Max.
Drive Level		1 ~ 500 μW (100 μW typical)
Load Capacitance		Series, 16 pF, 20 pF, 30 pF, 32 pF, or specify
Aging (at 25 °C)		± 3 ppm / year Max.
Storage Temperature Range		-40 ~ +85 °C

### ■ Equivalent Series Resistance (ESR)

Fundamental		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

