

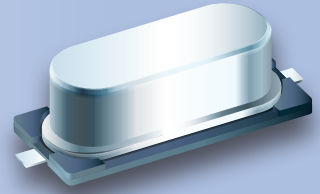
# Metal Can Type Crystals

## HC-49S SMD 9C Series

Quartz Crystals  
Series

### Features

- Surface mount type crystal units.
- A great number of standard frequencies.
- High frequency pullability and low equivalent series resistance.
- Highly mass production capability.
- The best choice of PC, STB, LCDM, and Cable Modem.
- RoHS Compliant / Pb Free.



### Electrical Specifications

Item / Type	9C
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	- 20 ~ + 70 °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)	± 5 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

