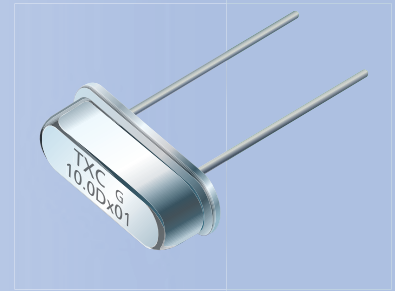


# Metal Can Type Crystals

## HC-49S 9B Series

### Features

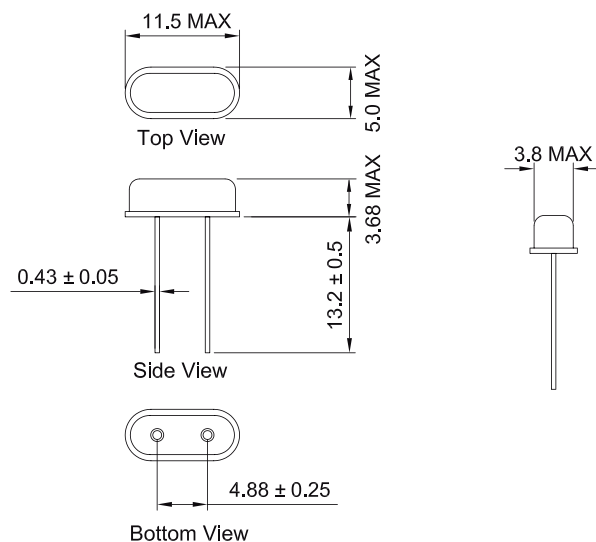
- Resistance welded type crystal units.
- A great number of standard frequencies.
- Higher frequency pullability and lower equivalent series resistance.
- Lower cost and highly mass production capability.
- The best choice of TV, STB, LCDM and Cable Modem.
- RoHS Compliant / Pb Free.



| Electrical Specifications                            |  |
|--|--|
| 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                          | - 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



Units: mm

