## SMD Glass Sealing Crystals 2.5 x 2.0 x 0.75 mm 7S Series

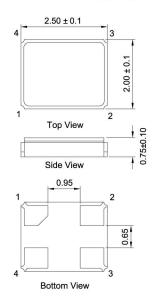
## **Features**

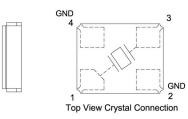
- · 4 pads SMD glass sealed Crystal.
- · Applications for NB, DSC, USB, Variety of compact portable consumer products reference clocks.
- · High reliable environmental performance.
- · Contains Pb in sealing glass exempted by RoHS directive.

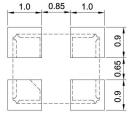
## **Electrical Specifications 7S** Item / Type Frequency Range 12 ~ 64 MHz ± 30 ppm, or specify Frequency Tolerance (at 25 °C) Frequency Stability Over Operating Temperature Range ± 30 ppm, or specify **Operating Temperature Range** -20 ~ + 70 °C, or specify Shunt Capacitance (C0) 3 pF Max. Drive Level $1 \sim 50 \mu W (10 \mu W typical)$ Load Capacitance 12 pF, or specify Aging (at 25 °C) $\pm$ 3 ppm / year Max. - 40 ~ + 85 °C Storage Temperature Range

| Equivalent Series Resistance(ESR) |            |  |             |           |
|-----------------------------------|------------|--|-------------|-----------|
| Fundamental                       |            |  |             |           |
| 12 ~ 13 MHz                       | 200 Ω Max. |  | 20 ~ 27 MHz | 80 Ω Max. |
| 13 ~ 16 MHz                       | 150 Ω Max. |  | 27 ~ 64 MHz | 60 Ω Max. |
| 16 ~ 20 MHz                       | 100 Ω Max. |  |             |           |

## **Dimensions**







Top View Suggested Layout