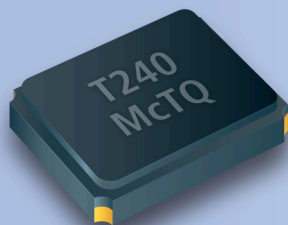


# SMD Glass Sealing Crystals

## 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.

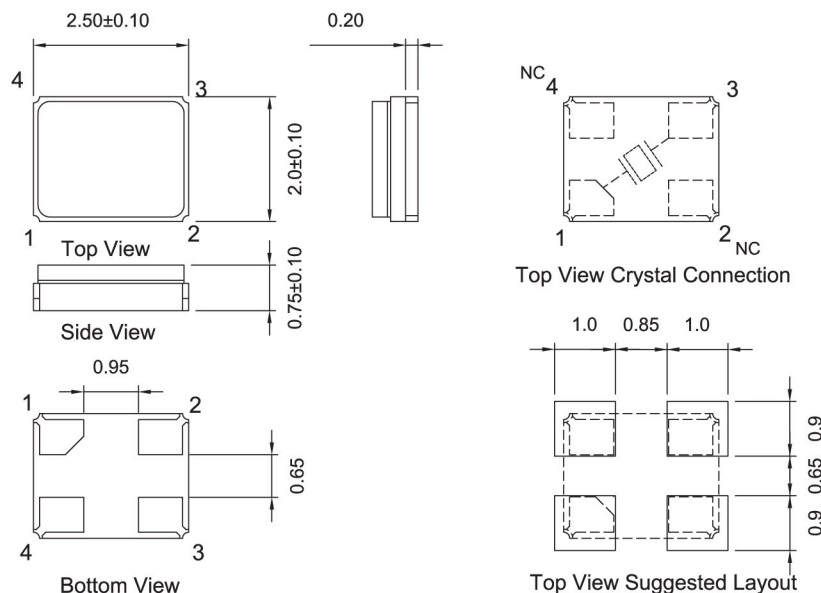
### Electrical Specifications

| Item / Type                                          | 7S                             |
|------------------------------------------------------|--------------------------------|
| Frequency Range                                      | 12 ~ 64 MHz                    |
| Frequency Tolerance (at 25 °C)                       | ± 10 ppm, ± 20 ppm, or specify |
| Frequency Stability Over Operating Temperature Range | ± 10 ppm, ± 20 ppm, or specify |
| Operating Temperature Range                          | -10 ~ + 70 °C, or specify      |
| Shunt Capacitance (C0)                               | 3 pF Max.                      |
| Drive Level                                          | 1 ~ 50 μW ( 10 μW typical)     |
| Load Capacitance                                     | 8 pF, 10 pF, or specify        |
| Aging (at 25 °C)                                     | ± 3 ppm / year Max.            |
| Storage Temperature Range                            | - 40 ~ + 85 °C                 |

### 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



Units: mm