

# SMD Seam Temperature Sensing Crystals 2.5 x 2.0 x 1.0 mm OZ Series



## Features

- High precision and high frequency stability.
- Excellent thermal coupling between thermistor and crystal.
- Application in mobile communications.
- RoHS Compliant / Pb Free.

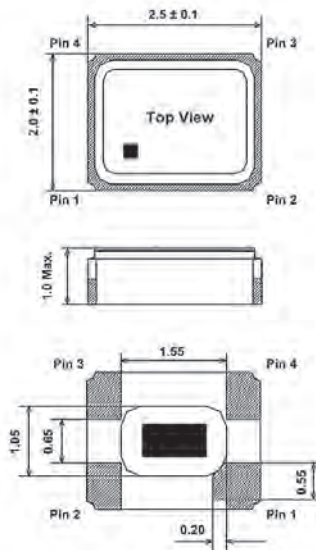
## Electrical Specifications

| Item / Type  | OZ                                |
|--|-----------------------------------|
| Frequency Range                                      | 12 ~ 54MHz                        |
| Frequency Tolerance (at 25°C)                        | ± 10 ppm , or specify             |
| Frequency Stability Over Operating Temperature Range | ± 10 ppm , or specify             |
| Operating Temperature Range                          | -30 ~ 85 °C or specify            |
| Shunt Capacitance (C0)                               | 3 pF Max.                         |
| Drive Level  | 1 ~ 200 μ W ( 50 μ W typical )    |
| Load Capacitance                                     | 8 pF , 10 pF , 12 pF , or specify |
| Aging (at 25°C)                                      | ± 3 ppm / year Max.               |
| Storage Temperature Range                            | -40 ~ +85 °C                      |
| Thermistor Resistance (25°C)                         | 100 kΩ , or specify               |
| Thermistor B-constant (25~50°C)                      | 4250, or specify                  |

## Equivalent Series Resistance(ESR)

| Fundamental |            |
|-------------|------------|
| 12 ~ 13 MHz | 150 Ω Max. |
| 14 ~ 30 MHz | 100 Ω Max. |
| 30 ~ 54 MHz | 60 Ω Max.  |

## Dimensions

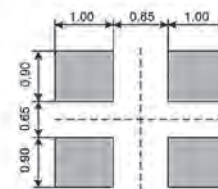


### PIN FUNCTION

|       | Symbol | Function              |
|-------|--------|-----------------------|
| Pin 1 | XT1    | XTAL Terminal 1       |
| Pin 2 | RT2    | Thermistor Terminal 2 |
| Pin 3 | XT2    | XTAL Terminal 2       |
| Pin 4 | RT1    | Thermistor Terminal 1 |

Note:  
Pin 2 is connected to the metal lid and thermistor  
Pin 4 is connected to the thermistor only

### SUGGESTED LAYOUT



Units: mm