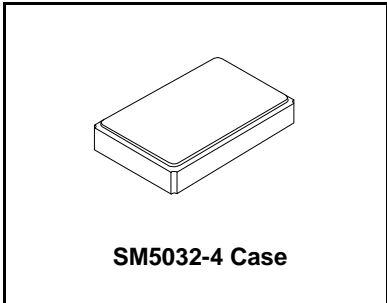




**XTL1004**

**13.56 MHz  
Crystal Unit**



- **Surface Mount Seam Weld Package**
- **Excellent Reliability Performance**
- **Good Frequency Perturbation and Stability over Temperature**

The XTL1004 is a surface mount 5.0 x 3.2 mm crystal unit for use in wireless telecommunications devices, especially for a need of ultra miniature package for mobility.

**Electrical Characteristics**

| Characteristic   | Sym       | Notes | Minimum                                 | Typical  | Maximum | Units |
|--|-----------|-------|---|----------|---------|-------|
| Nominal Frequency  |           |       |   | 13.56000 |         | MHz   |
| Mode of Oscillation                                      |           |       | Fundamental                             |          |         |       |
| Storage Temperature Range                                |           |       | -40                                     |          | +85     | °C    |
| Operating Temperature Range                              |           |       | -20                                     |          | +70     | °C    |
| Frequency Stability over Operating Temperature Range     |           |       | ±10 ppm (referred to the value at 25°C) |          |         |       |
| Frequency Make Tolerance                                 | FL        |       | ±10 ppm @ 25°C ±3°C                     |          |         |       |
| Equivalent Series Resistance                             | ESR       |       |   |          | 50      | Ω     |
| Nominal Drive Level                                      |           |       |   | 10       |         | uW    |
| Shunt Capacitance  | Co        |       |   |          | 3       | pF    |
| Load Capacitance   | CL        |       |   | 20       |         | pF    |
| Lid Symbolization (in addition to Lot and/or Date Codes) | 1004 YWWS |       |   |          |         |       |



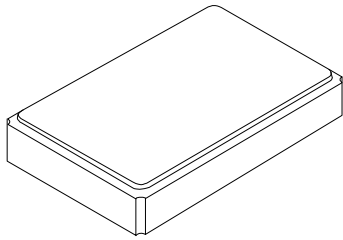
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**Notes:**

1. The design, manufacturing process, and specifications of this device are subject to change without notice.

# SM5032-4 Case

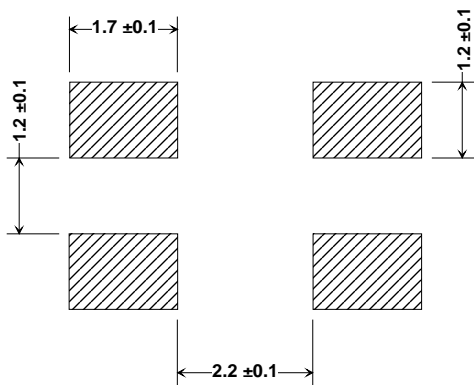
## 4-Terminal Surface-Mount Seam Weld Case 5.0 x 3.2 mm Nominal Footprint



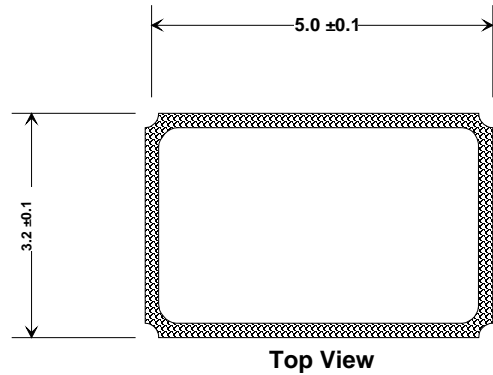
### Electrical Connections

| Pin | Connection |
|-----|------------|
| 1   | GND        |
| 2   | IN/OUT     |
| 3   | GND        |
| 4   | IN/OUT     |

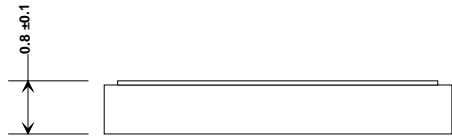
Note: Pin #1 & #3 are connected to metal cap on top



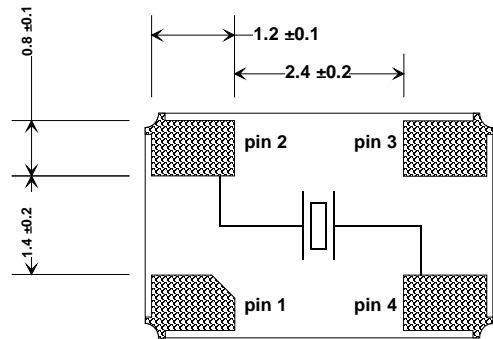
Footprint (mm)



Top View

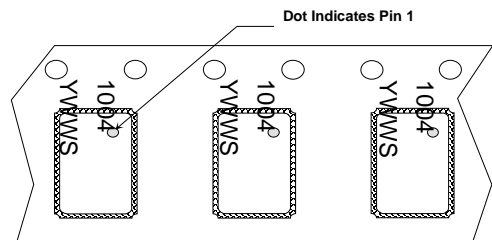


Side View



Bottom View

Package Dimensions (mm)



Package Orientation in Carrier Tape