

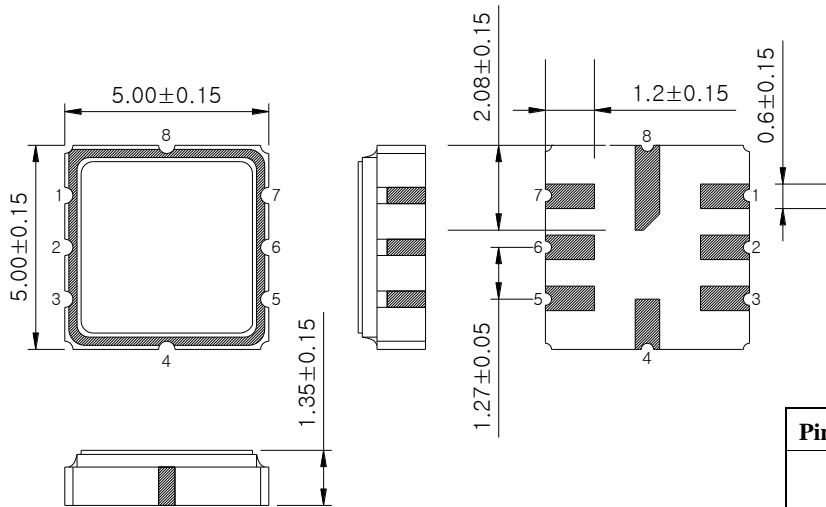
# SAW Resonator R33511



## Features

- 1-port Resonator
- Quartz Frequency Stabilization
- For transmitters or Local Oscillators

## Package Dimension – S5050



| Pin Configuration |        |
|-------------------|--------|
| 2                 | Input  |
| 6                 | Output |
| 1, 3, 4, 5, 7, 8  | Ground |

## Marking Configuration

ITF<sup>1)</sup>  
33511<sup>2)</sup>

1) Manufacturer name

2) Marking Number

\* Ink or Laser Marking available

\* Front 4 digits for S5050

|  |   |           |             |     |
|--|---|-----------|-------------|-----|
|  | <b>ITF Co., Ltd.</b><br>102-901, Bucheon Technopark 364,<br>Samjeong-Dong, Ojeong-Gu, Bucheon-City,<br>Gyeonggi-Do, Korea 421-809 | Part No.  | R33511      |     |
|  |   | Rev. Date | 2015-10-30  |     |
|  |   | Rev.      | NS3114-AS02 | 1/5 |

# SAW Resonator R33511



## Maximum Ratings

| Parameter                   | Unit | Minimum | Typical | Maximum |
|-----------------------------|------|---------|---------|---------|
| Operating Temperature Range | °C   | -10     | 25      | 60      |
| Storage Temperature Range   | °C   | -40     | -       | 85      |
| Power Handling Capability   | dBm  | -       | 0       | -       |

Electrostatics Sensitive Device (ESD)

## Electrical Specification

$F_R = 335.1\text{MHz}$


Terminating source impedance :  $50\Omega$  and matching network

Terminating load impedance :  $50\Omega$  and matching network

|                                      |                     | Minimum | Typical         | Maximum |
|--------------------------------------|---------------------|---------|-----------------|---------|
| Resonance Frequency ( $F_R$ )        | MHz                 | 335.025 | 335.100         | 335.175 |
| Insertion Loss                       | dB                  | -       | 1.5             | 2.5     |
| 50 ohm Loaded Q<br>Unloaded Q        |                     |         | 2,000<br>13,900 |         |
| Trun-over Temperature                | °C                  | 10      | 25              | 40      |
| Temperature Coefficient of Frequency | ppm/°C <sup>2</sup> | -       | -0.032          | -       |

### Notes :

- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature

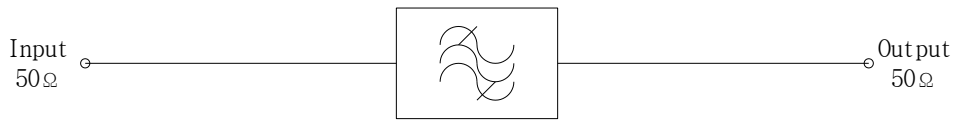
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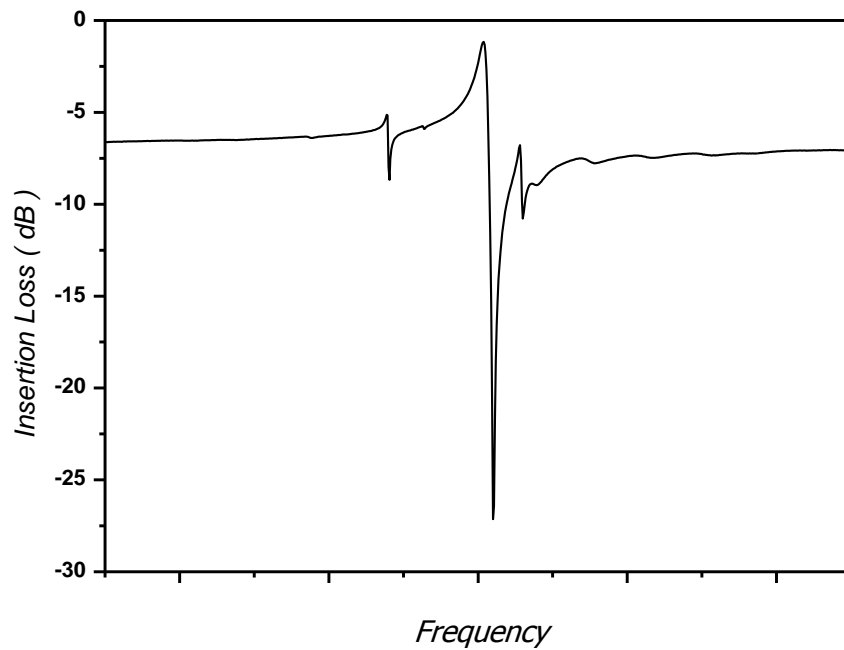



## Matching Schematic

( Actual matching values may vary due to PCB layout and parasitics )



## Frequency Response



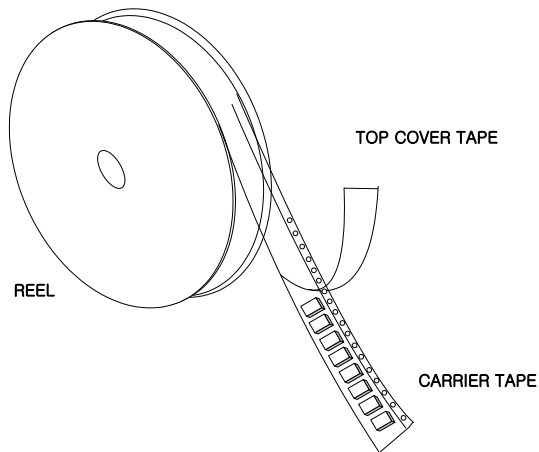
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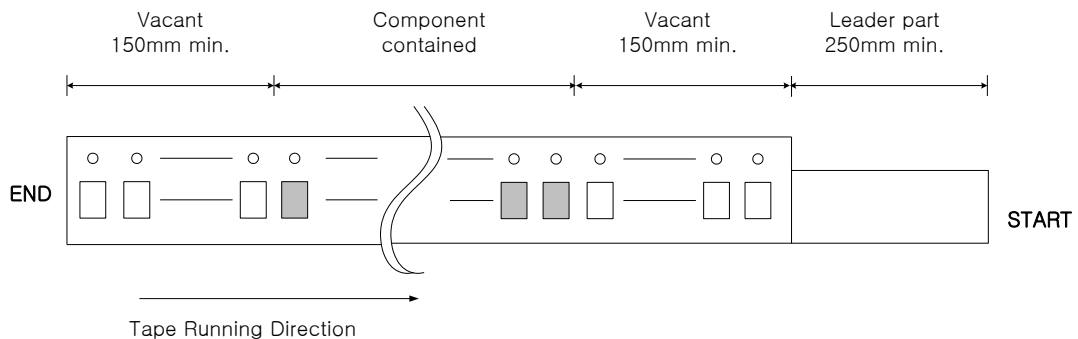
## Packing Specification

1. Reeling Quantity : 1000 pcs / reel
2. Taping Structure : The tape shall be wound around the reel in the direction shown below.



## Tape Specification

1. Leader part and vacant position specification

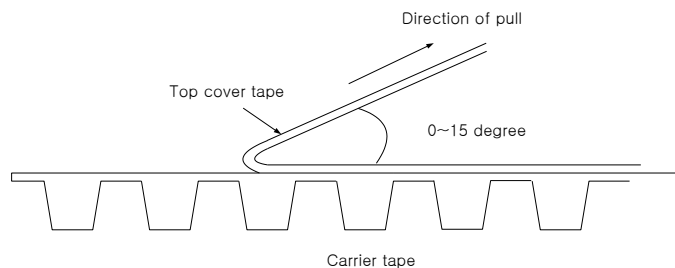



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g



|   |   |           |             |     |
|---|---|-----------|-------------|-----|
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