

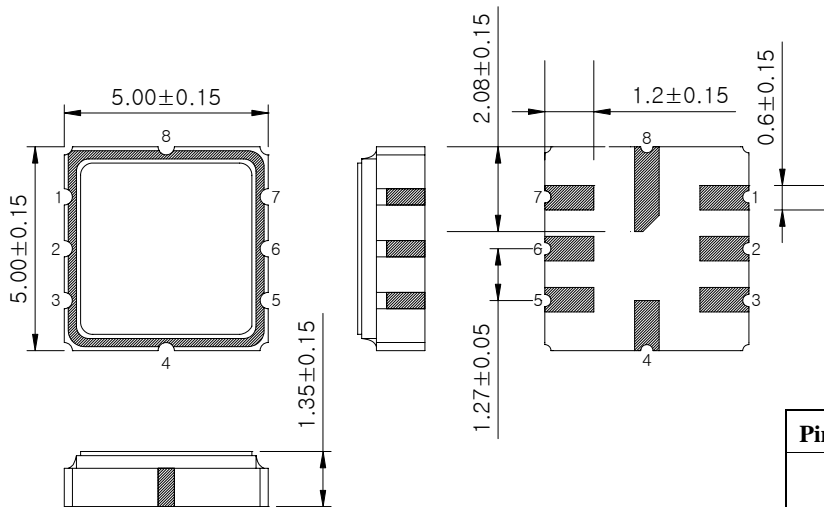
# SAW Resonator R31451



## 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

## Package Dimension – TO-39



Pin Configuration	
1	Input
2	Output
3	Case ground

	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	R31451	
		Rev. Date	2004-04-20	
		Rev.	NS3108-AS01	1/6

# SAW Resonator R31451



## Package Dimension – F-11



Pin Configuration	
1	Input
4	Output
2, 3	Case ground

## Marking Configuration

ITF<sup>1)</sup>  
31451<sup>2)</sup>

- 1) Manufacturer name
- 2) Marking Number
  - \* Ink or Laser Marking available
  - \* Front 4 digits for S5050

## 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)

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# SAW Resonator R31451



## Electrical Specification

$F_R = 314.5\text{MHz}$

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

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

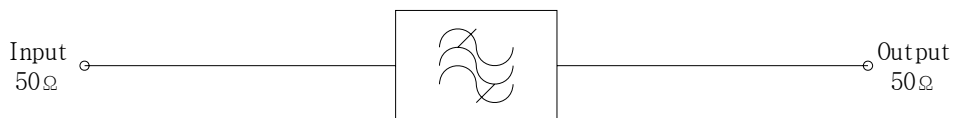
		Minimum	Typical	Maximum
Resonance Frequency ( $F_R$ )	MHz	314.425	314.500	314.575
Insertion Loss	dB	-	1.5	2.5
50 ohm Loaded Q			2,000	
Unloaded Q			13,900	
Trun-over Temperature	$^{\circ}\text{C}$	10	25	40
Temperature Coefficient of Frequency	$\text{ppm}/^{\circ}\text{C}^2$	-	-0.032	-

### 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

## Matching Schematic

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

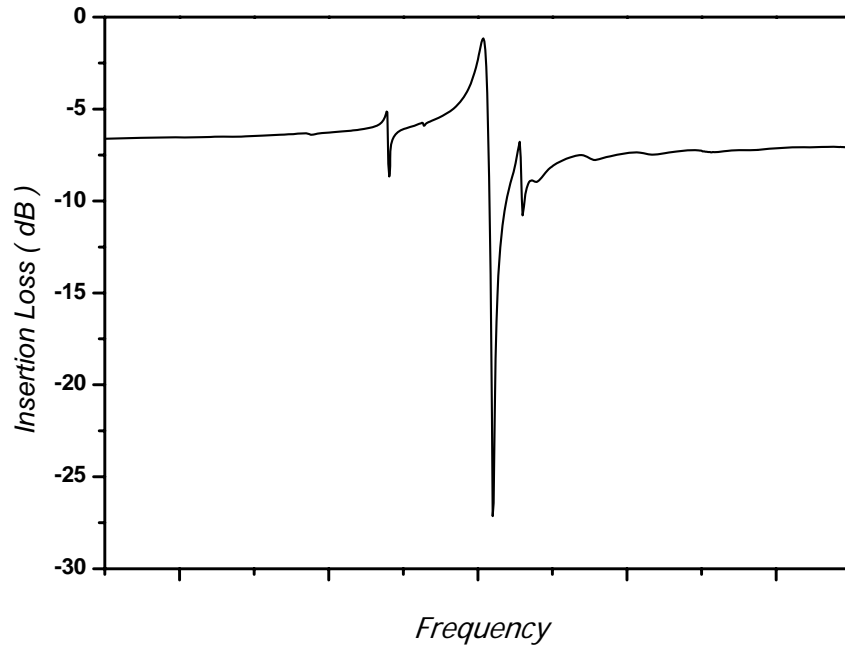



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# SAW Resonator R31451



## Frequency Response



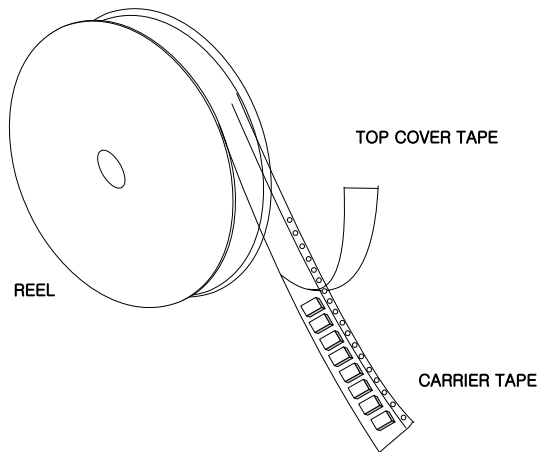
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	R31451	
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# SAW Resonator R31451



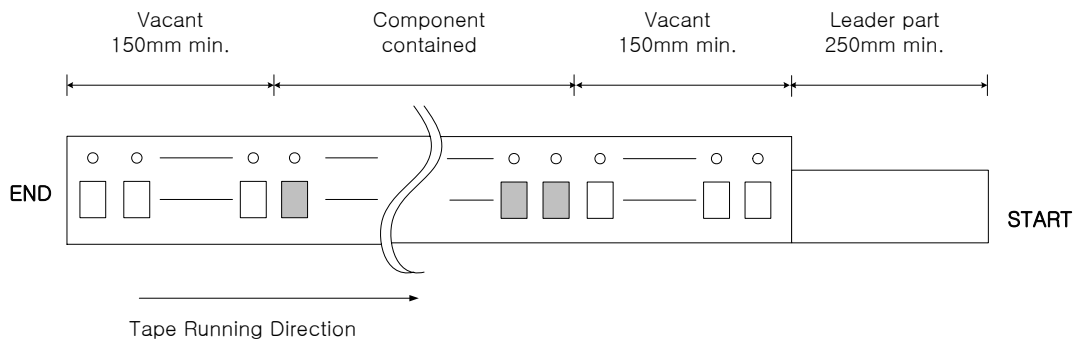
## Packing Specification

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

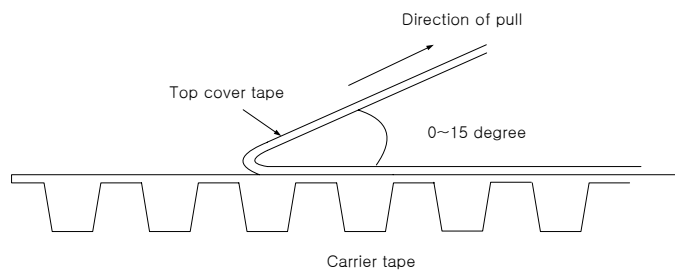


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

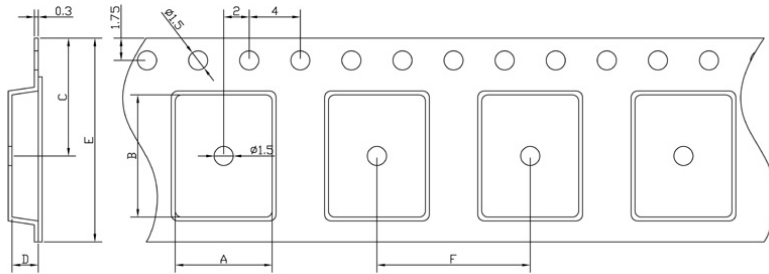


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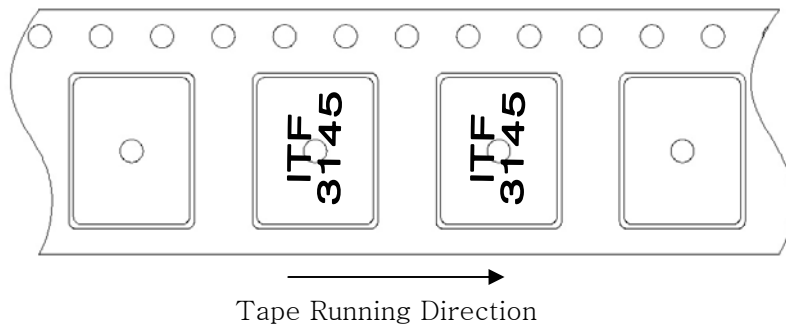


## Carrier Tape Dimensions [unit : mm]

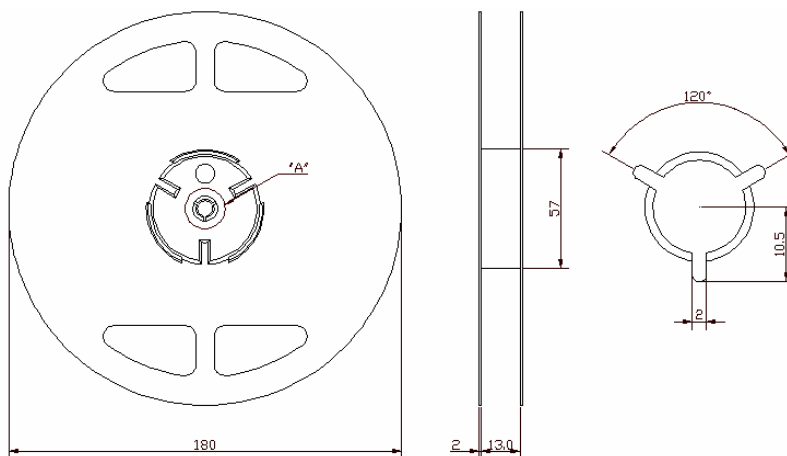


A	5.50 ± 0.1
B	5.50 ± 0.1
C	7.25 ± 0.1
D	1.95 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



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