



深圳市康华尔电子有限公司

SHENZHEN KONUAER ELECTRONICS CO.,LTD

樣品承認書

SAMPLE APPROVAL SHEET

CUSTOMER:

SIZE UP :

声表面谐振器

Volume:

R315M

NUMBER:

SMD3030mm

DATE:

承認後請寄回一份

PLS SEND BACK ONE COPY TO US AFTER YOUR APPROVAL

承認結果 CONCLUSION	客戶簽名 SIGNATURE	客戶承認章 STAMP	日期 DATE	備注 REMARK
合格 ACCEPT				
不合格 REJECT				

制表: JACK LIU/

审核: _____

(公章)

尊敬的客户: 请您抽出一点时间, 在 7-10 个工作日内将承认书回签, 若未回签, 以视默认. 谢谢合作!

SAW RESONATOR

KONR315M SMD-3030mm

This specification shall cover the characteristics of 1-port SAW resonator with R315M used for remote-control security.

2. Electrical Specification

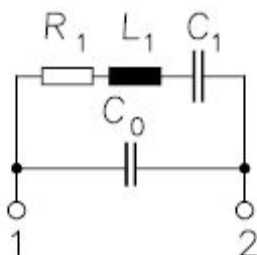
2.1 Maximum Rating

DC Voltage VDC	10V
AC Voltage Vpp	10V 50Hz/60Hz
Operation temperature	-40℃ to +85℃
Storage temperature	-45℃ to +85℃
Source Power	0dBm

2.2 Electronic Characteristics

Item		Unites	Minimum	Typical	Maximum
Center Frequency		MHz	314.925	315.000	315.075
Insertion Loss		dB		1.4	1.9
Quality Factor	Unload Q		8000	12800	
	50Ω Loaded Q		1000	2000	
Temperature	Turnover Temperature	℃	10	25	40
Stability	Freq.temp.Coefficient	ppm/℃		0.032	
Frequency Aging		ppm/yr		<±10	
DC. Insulation Resistance		MΩ	1.0		
RF Equivalent RLC Model	Motional Resistance R1	Ω		17.6	
	Motional Inductance L1	μH		118	
	Motional Capacitance C1	fF		2.16	
Transducer Static Capacitance C0		pF		2.13	

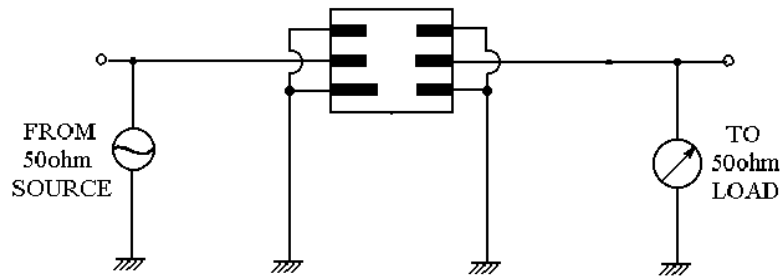
2.3 Equivalent LC Model



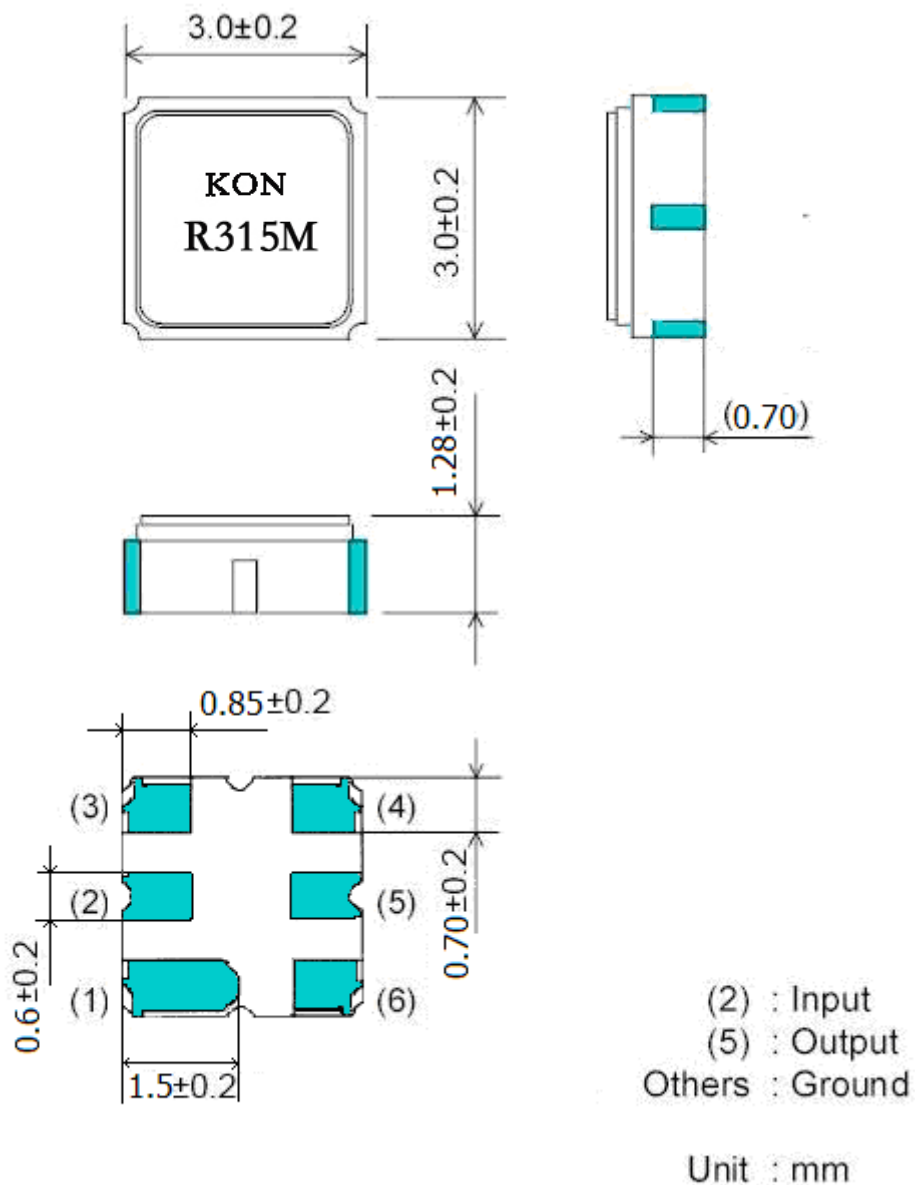
3. Test Circuit

SAW RESONATOR

KONR315M SMD-3030mm



4. Dimension



1. KON: Manufacture's logo
2. R315M : Model code

5. Environment Characteristic

5-1 Thermal Shock:

The components shall remain within the electrical specifications after being kept at the condition of heat cycle conditions: $T_A = -40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, $T_B = 85^{\circ}\text{C} \pm 2^{\circ}\text{C}$, $t_1 = t_2 = 30\text{min}$, switch time $\leq 3\text{min}$ & cycle time : 100 times, recovery time: $2\text{h} \pm 0.5\text{h}$.

5-2 Resistance to solder heat

Submerge the device terminals into the solder bath at $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 10 ± 1 sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in 2.2.

5-3 Solder ability

Submerge the device terminals into the solder bath at $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5s, More than 95% area of the soldering pad must be covered with new solder. It shall meet the specifications in 2.2

5-4 The Temperature Storage:

5.3.1 High Temperature Storage: The components shall remain within the electrical specifications after being kept at the $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for $96\text{h} \pm 4\text{h}$, recovery time : $2\text{h} \pm 0.5\text{h}$.

5.3.2 Low Temperature Storage: The components shall remain within the electrical specifications after being kept at the $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for $96\text{h} \pm 4\text{h}$, recovery time : $2\text{h} \pm 0.5\text{h}$.

5-5 Humidity test:

The components shall remain within the electrical specifications after being kept at the condition of ambient temperature $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$, and 90~96% RH for $96\text{h} \pm 4\text{h}$.

5-6 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1m for 3 times. The resonator shall fulfill the specifications in 2.2.

5-7 Vibration

Subject the device to the vibration for 2 hour each in X, Y and Z axes with the amplitude of 1.5 mm at 10 to 55 Hz. The resonator shall fulfill the specifications in 2.2.

6. Remark

6.1 Static voltage

Static voltage between signal load & ground may cause deterioration & destruction of the component. Please avoid static voltage.

6.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning

6.3 Soldering

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Only leads of component may be soldered. Please avoid soldering another part of component.

7. Packing

7.1 Dimensions

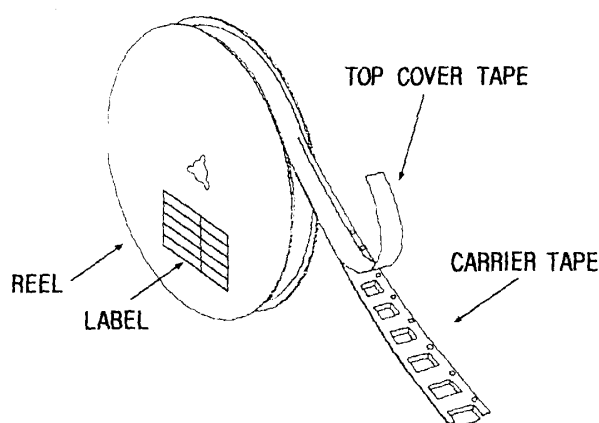
- (1) Carrier Tape: Figure 1
- (2) Reel: Figure 2
- (3) The product shall be packed properly not to be damaged during transportation and storage.

7.2 Reeling Quantity

1000 pcs/reel 7''
3000 pcs/reel 13''

7.3 Taping Structure

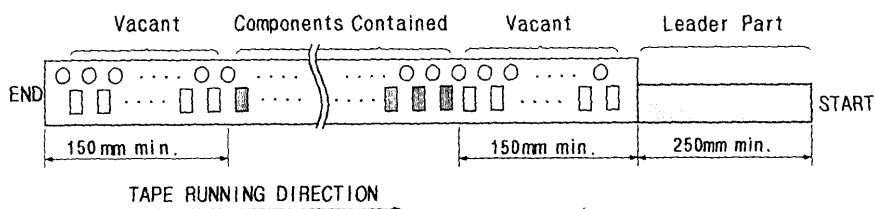
- (1) The tape shall be wound around the reel in the direction shown below.



- (2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

- (3) Leader part and vacant position specifications.

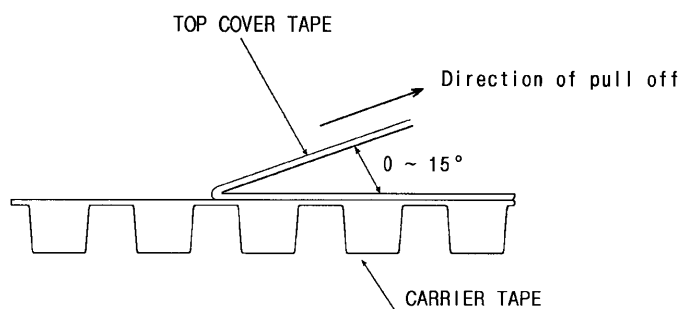


8. Tape Specifications

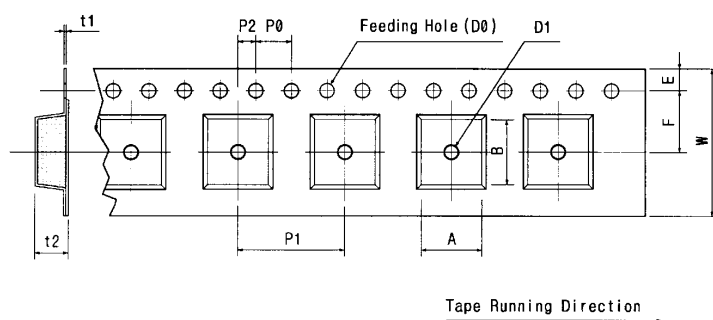
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

8.2 Top Cover Tape Adhesion (See the below figure)

- (1) pull off angle: $0 \sim 15^\circ$
- (2) speed: 300mm/min.
- (3) force: 20~70g



[Figure 1] Carrier Tape Dimensions



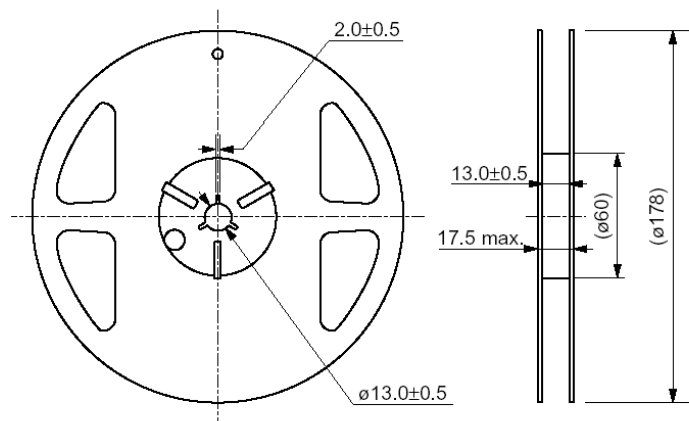
[Unit: mm]

W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.0	5.5	1.75	4.0	4.0	2.0	Ø1.5	Ø1.0	0.3	1.25	3.3±	3.3±
±0.3	±0.05	±0.1	±0.1	±0.1	±0.05	±0.1	±0.25	±0.05	±0.1	0.1	0.1

[Figure 2] Reel Dimensions

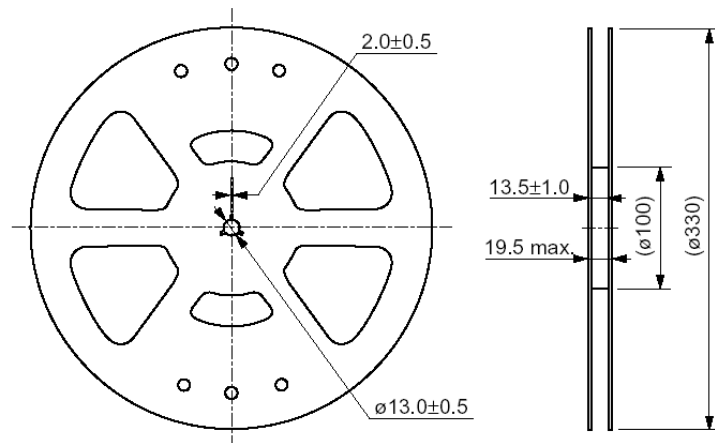
SAW RESONATOR

KONR315M SMD-3030mm



ø178 Reel Dimension

(in mm)



ø330 Reel Dimension

(in mm)