SHOULDER

SHOULDER ELECTRONICS CO.,LTD

SPECIFICATION FOR APPROVAL

NO 编号：_____

CUSTOMER 客　户：_____

PRODUCT　产　品：SAW FILTER

MODEL NO 型　号：HDF915AN S4

PREPARED 编　制：Fengyu　CHECKED　审　核：York

APPROVED 批　准：Lijiating　D A T E　日　期：2006-5-11

CUSTOMER 客户确认意见：	
CHECKED　审 核：	
APPROVED 批 准：	
D A T E　日 期：	

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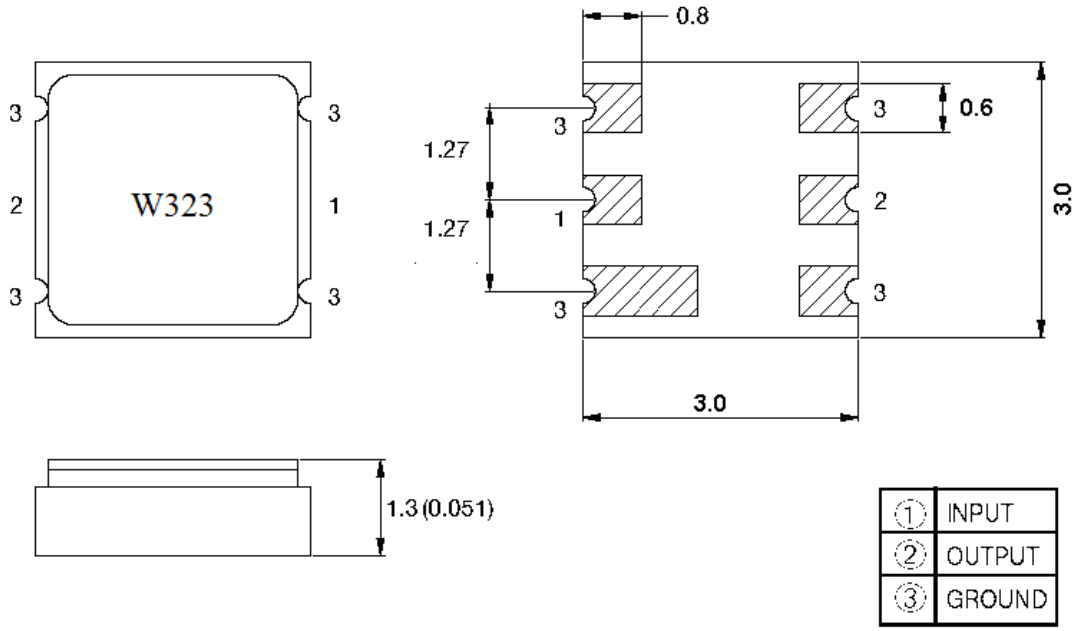
1. Package Dimension



Unit:mm

2. Marking

W323

1.Color: Black or Blue

2.915: Center Frequency(MHz)

3. Performance

3.1 Application

Low-Loss SAW Filter of cordless system.
Center Frequency:915 MHz

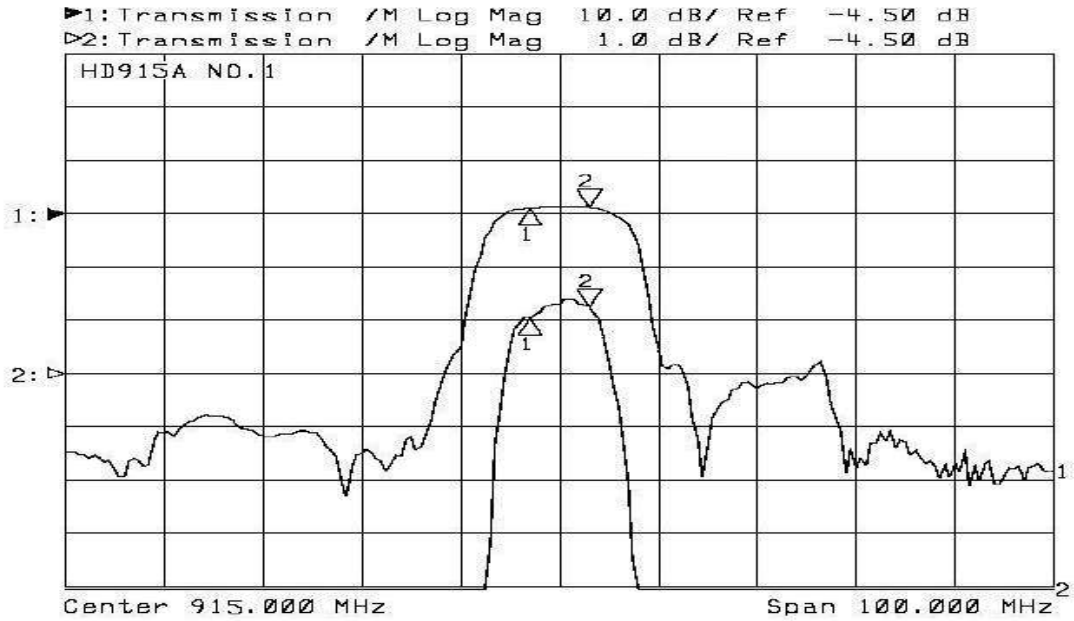
3.2 Maximum Rating

Operation Temperature Range	-20℃ to +50℃
Storage Temperature Range	-40℃to +85℃
DC. Permissive Voltage	0 V DC. max.
Maximum Input Power	5dBm

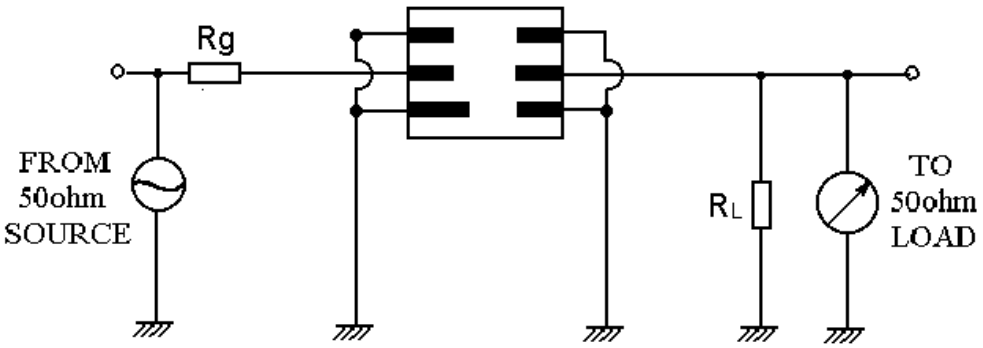
3.3 Electronic Characteristics

Item	Specification		
Center Frequency(fo)	915 MHz		
Insertion Loss(dB)	Min.	typical	Max.
1.)914.5-915.5 MHz		2.8	4.0max
2.)900~902 MHz	35	40	
3.)928~930MHz	25	40	
4.)850~900MHz	37	45	
5.)950~1000 MHz	40	55	
Ripple deviation (Fo+/-0.5MHz)(dB)		0.5	1.5
Input/output Impedance(Nominal)	50 Ω		

3.4 Frequency Characteristics



3.5 Test Circuit



4. ENVIRONMENTAL CHARACTERISTICS

4-1 Temperature cycling

Subject the device to a low temperature of -40℃ for 30 minutes. Following by a high temperature of +25℃ for 5 Minutes and a higher temperature of +85℃ for 30 Minutes. Then release the device into the room conditions for 1 to 2 hours prior to the measurement. It shall meet the specifications in table 1.

4-2 Resistance to solder heat

Submerge the device terminals into the solder bath at 260℃ ±5℃ for 10±1 sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in table 1.

4-3 Solderability

Submerge the device terminals into the solder bath at 245℃ ±5℃ for 5s, More than 95% area of the soldering pad must be covered with new solder. It shall meet the specifications in table 1.

4-4 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1 m 3 times. the filter shall fulfill the specifications in table 1.

4-5 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 filter shall fulfill the specifications in table 1.

5. REMARK

5.1 Static voltage

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

5.2 Ultrasonic cleaning

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

5.3 Soldering

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

6. Packing

6.1 Dimensions

(1) Carrier Tape: Figure 1

(2) Reel: Figure 2

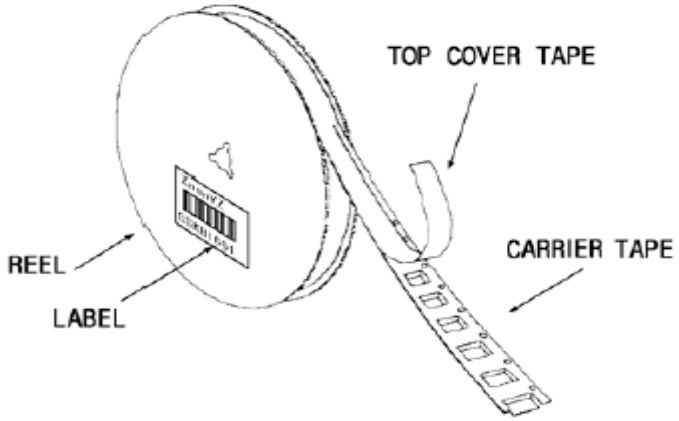
(3) The product shall be packed properly not to be damaged during transportation and storage.

6.2 Reeling Quantity

1000 pcs/reel 7”
3000 pcs/reel 13”

6.3 Taping Structure

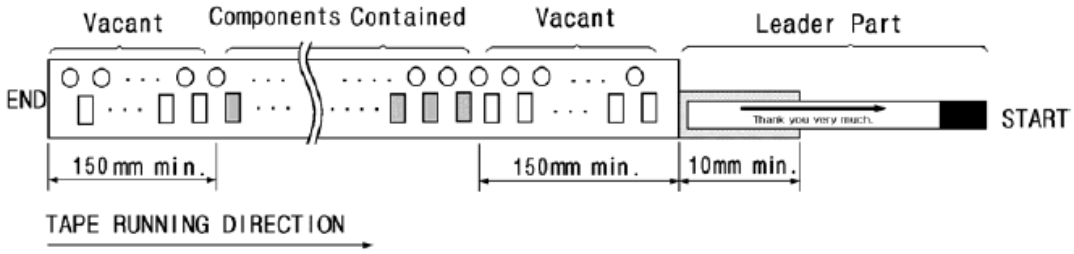
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.

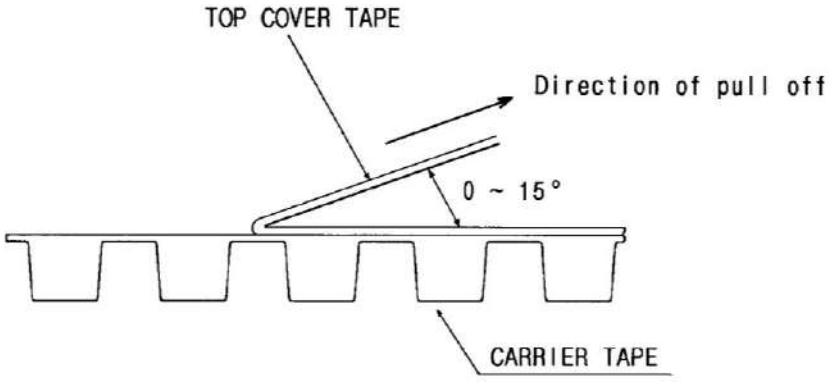


7. TAPE SPECIFICATIONS

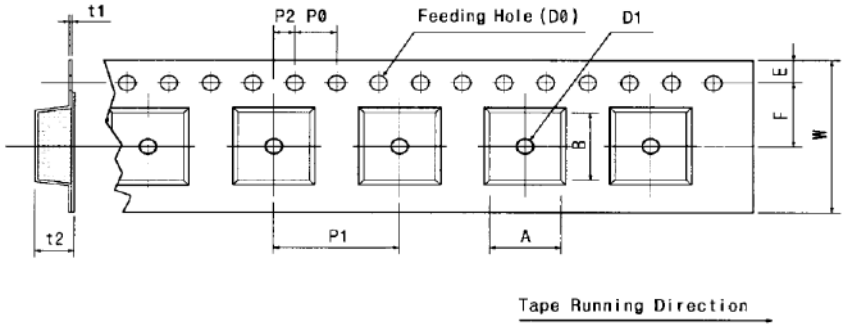
7.1 Tensile Strength of Carrier Tape: 4.4N/mm width

7.2 Top Cover Tape Adhesion (See the below figure)

(1) pull off angle: 0~15^{o}
(2) speed: 300mm/min.
(3) force: 20~70g



[Figure 1] Carrier Tape Dimensions

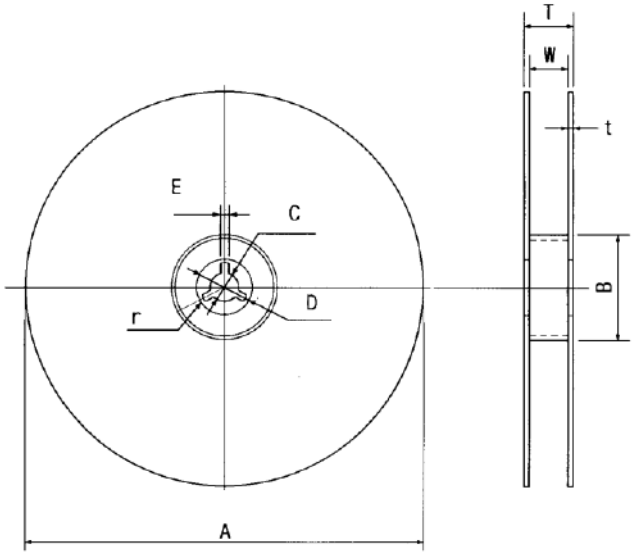


[Unit:mm]

W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.00 ±0.30	5.50 ±0.10	1.75 ±0.10	4.00 ±0.10	4.00 ±0.10	2.00 ±0.10	Ø1.50	Ø1.5 ±0.25	0.31 ±0.05	1.30 ±0.10	3.4 MAX.	3.4 MAX

[Figure 2]

[Unit:mm]



A	B	C	D	E	W	t	r
Ø330 ±1.0	Ø100 ±0.5	Ø13 ±0.5	Ø21 ±0.8	2 ±0.5	13 ±0.3	3 max.	1.0 max.