SPECIFICATION

PRODUCT: **SAW FILTER**

MODEL: **HD F866ANS6**

MARKING: **HDF6812**

HD 好达

SHOULDER ELECTRONICS LIMITED

1. Package Dimension

①	INPUT
②	OUTPUT
③	GROUND

2. Marking   HDF6812

2.1 Color: Black or Blue

2.2 866.: Center Frequency(MHz)

3. Performance

3.1 Application

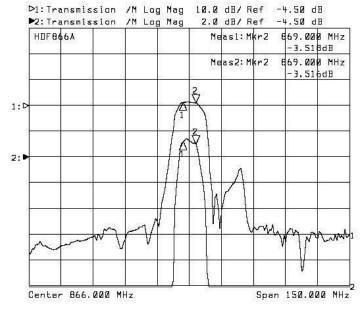Low-Loss SAW Filter of cordless system.

Center Frequency:868.6 MHz

3.2 Maximum Rating

Operation Temperature Range	-40℃ to +85℃0
Storage Temperature Range	-40℃ to +85℃
DC. Permissive Voltage	0 V DC. max.
Maximum Input Power	10dBm

3.3 Electronic Characteristics
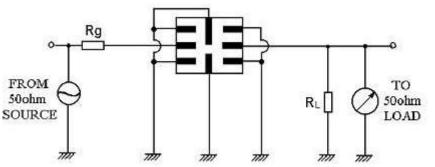
Item	Frequency	Specification
Center Frequency(Fo)	866MHz	
Pass Band Width	Fo±0.7MHz	
Insertion Loss	Fo±0.7MHz	4.5dB max.
Stop Band Rejection	Fo-400~-40.8MHz Fo+50~+400MHz	40dB min. 40dB min.
Terminating Impedance		50Ω

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.
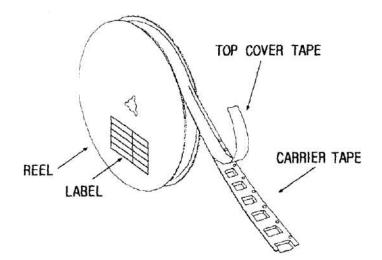
7. Packing

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''

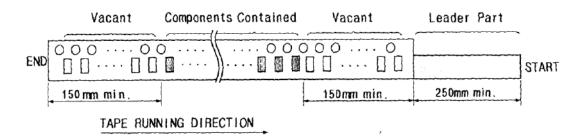3000 pcs/reel   13''

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.	

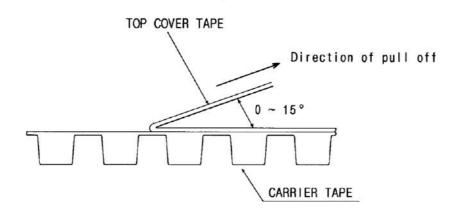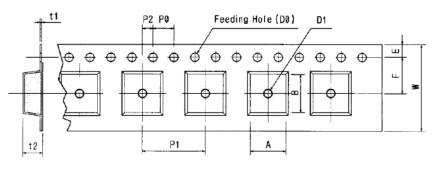(3) Leader part and vacant position specifications.

8. TAPE SPECIFICATIONS

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

8.2 Top Cover Tape Adhesion (See the below figure)

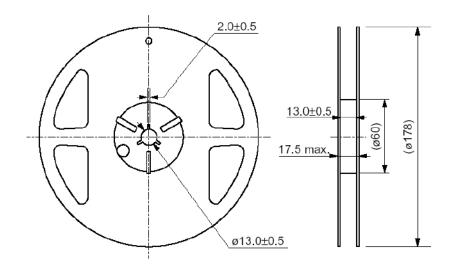 (1) pull off angle: $0{\sim}15^{o}$
  (2) speed: 300mm/min.
  (3) force: 20~70g
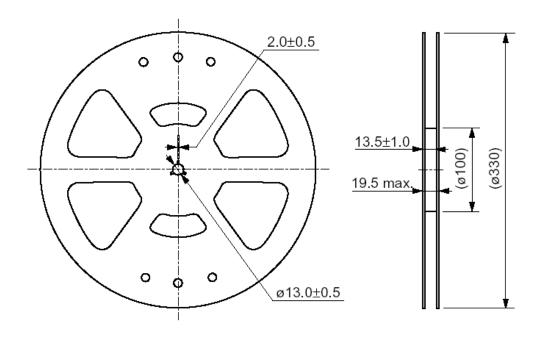
TOP COVER TAPE

Direction of pull off

0 ~ 15°

CARRIER TAPE

[Figure 1] Carrier Tape Dimensions

t1

P2 P0   Feeding Hole (D0)   D1

Tape Running Direction

[Unit:mm]

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

[Figure 2]

2.0±0.5

13.0±0.5

17.5 max.

(ø60)

(ø178)

ø13.0±0.5

ø178 Reel Dimension

(in mm)

ø330 Reel Dimension

(in mm)