

规格书编号

SPEC NO :

产品规格书

SPECIFICATION

CUSTOMER 客户: _____
PRODUCT 产品: _____ SAW FILTER _____
MODEL NO 型号: _____ HDF450AS4 _____
PREPARED 编制: _____ CHECKED 审核: _____
APPROVED 批准: _____ D A T E 日期: _____ 2006-5-11 _____

| | | |
|-------------------------|-------------|---------|
| 客户确认 CUSTOMER RECEIVED: | | |
| 审核 CHECKED | 批准 APPROVED | 日期 DATE |
| | | |

无锡市好达电子有限公司
Shoulder Electronics Limited

1. SCOPE

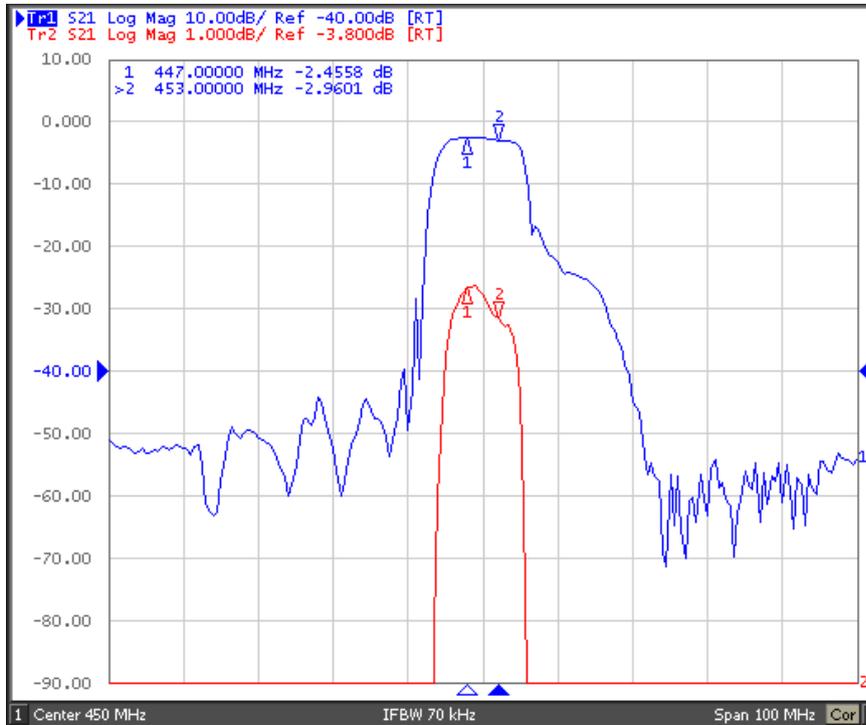
This specification shall cover the characteristics of SAW filter With F450A used for the page system.

2. ELECTRICAL SPECIFICATION

| | |
|-----------------------|----------------|
| DC Voltage VDC | 10V |
| AC Voltage Vpp | 10V50Hz/60Hz |
| Operation temperature | -40°C to +85°C |
| Storage temperature | -45°C to +85°C |
| RF Power Dissipation | 0dBm |

Electronic Characteristics

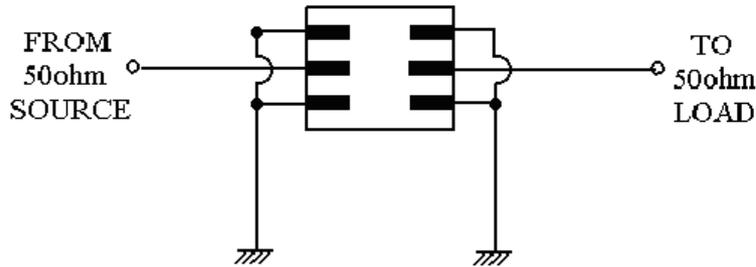
2-1. Typical frequency response



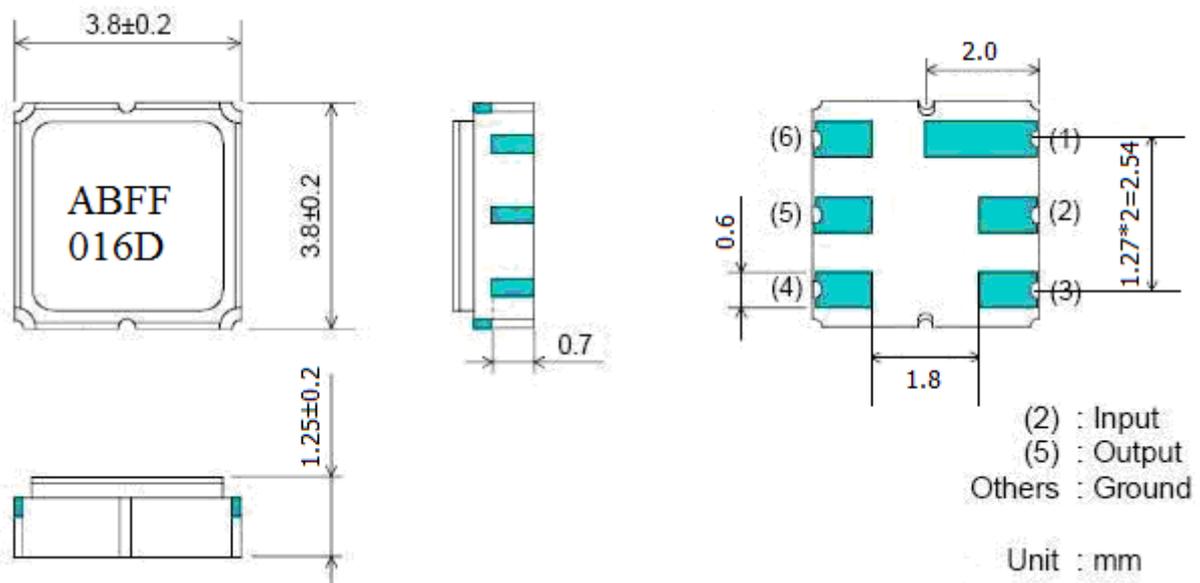
2-2. Electrical characteristics

| Part number | F450A | Unit |
|---------------------------------|---------|-------|
| Nominal center frequency (Fo) | 450 | MHz |
| Insertion Loss | | |
| 1. fo-45.8~fo-39.8 MHz | 45min. | dB |
| 2. fo ± 3.0 MHz | 4.5max. | |
| 3. fo +39.8~ fo +45.8MHz | 45min. | |
| Ripple (with Fo ± 3.0MHz) | 2.0max | dB |
| Input/Output Impedance(Nominal) | 50//0 | Ω /pF |

3. TEST CIRCUIT



4. DIMENSION



5. ENVIRONMENTAL CHARACTERISTICS

5-1 High temperature exposure

Subject the device to +85°C for 16 hours. Then release the filter into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 2-2.

5-2 Low temperature exposure

Subject the device to -40°C for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 2-2.

5-3 Temperature cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of +85°C for 30 Minutes. Then release the device into the room conditions for 24 hours prior to the measurement. It shall meet the specifications in 2-2.

5-4 Resistance to solder heat

Dip the device terminals no closer than 1.5mm into the solder bath at 260°C ± 10°C for 10 ± 1 sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in 2-2.

5-5 Solderability

Subject 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 terminals must be covered with new solder. It shall meet the specifications in 2-2.

5-6 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1m 3 times. the device shall fulfill the specifications in 2-2.

5-7 Vibration

Subject the device to the vibration for 1 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 Hz. The device 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

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.

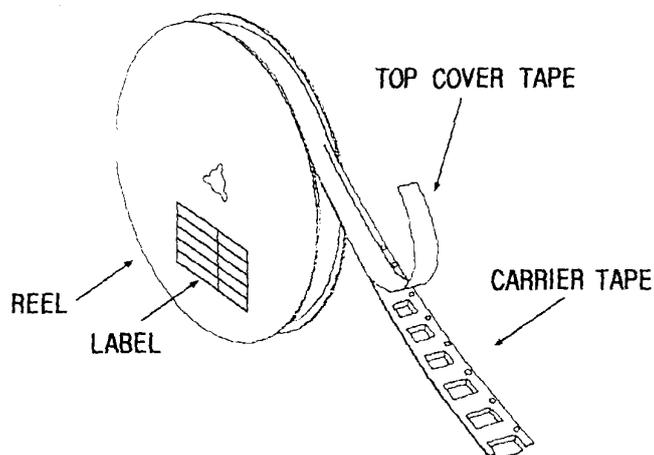
7.2 Reeling Quantity

1000 pcs/reel 7"

3000 pcs/reel 13"

7.3 Taping Structure

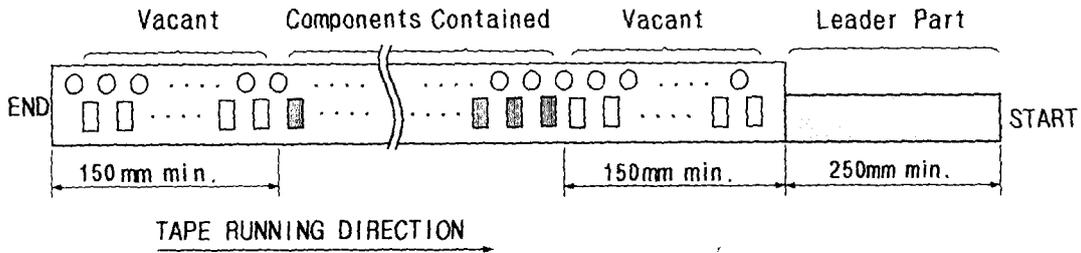
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

| | |
|-------------------|--|
| Device Name | |
| User Product Name | |
| Quantity | |
| Lot No. | |

(3) Leader part and vacant position specifications.

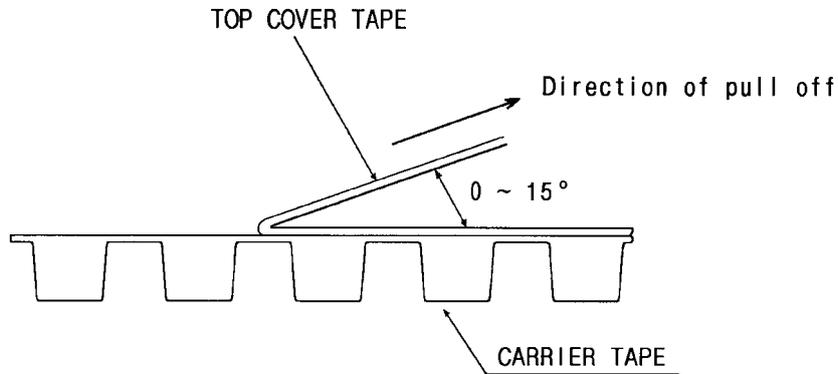


8. TAPE SPECIFICATIONS

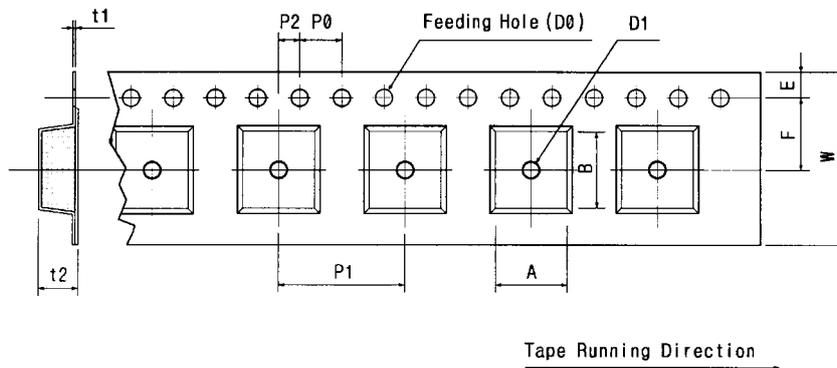
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

8.2 Top Cover Tape Adhesion (See the below figure)

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



[Figure 1] Carrier Tape Dimensions

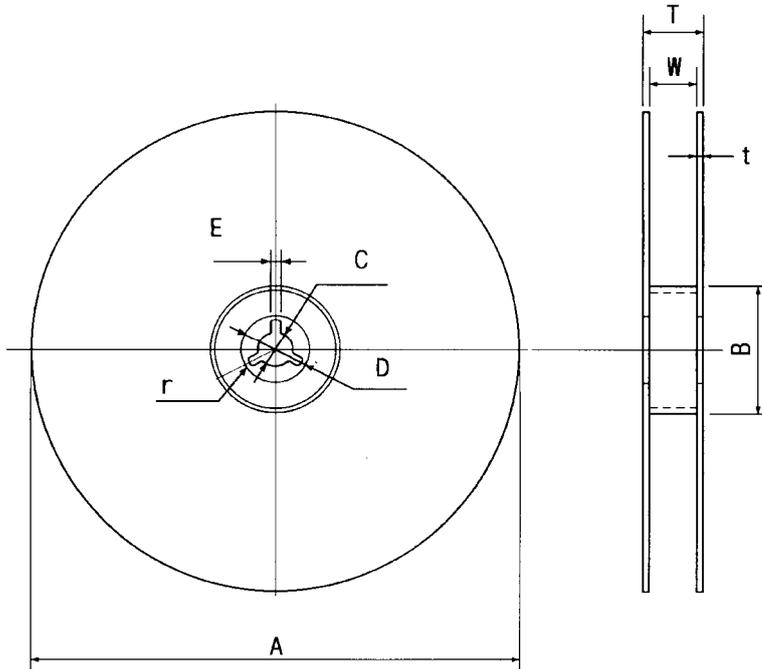


[Unit:mm]

| W | F | E | P0 | P1 | P2 | D0 | D1 | t1 | t2 | A | B |
|------|-------|------|------|------|-------|------|-------|-------|------|------|------|
| 12.0 | 5.5 | 1.75 | 4.0 | 8.0 | 2.0 | Ø1.5 | Ø1.0 | 0.3 | 2.10 | 6.40 | 5.20 |
| ±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]

[Unit:mm]



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