

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: \_\_\_\_\_ HDF430A SMD-4 \_\_\_\_\_  
MARKING 印字: \_\_\_\_\_ HDF4449 \_\_\_\_\_  
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

### 更改历史记录 History Record

更改日期 Date	规格书编号 Spec. No.	产品型号 Part No.	客户产品型号 Customer No.	更改内容描述 Modify Content	备注 Remark

### 1. SCOPE

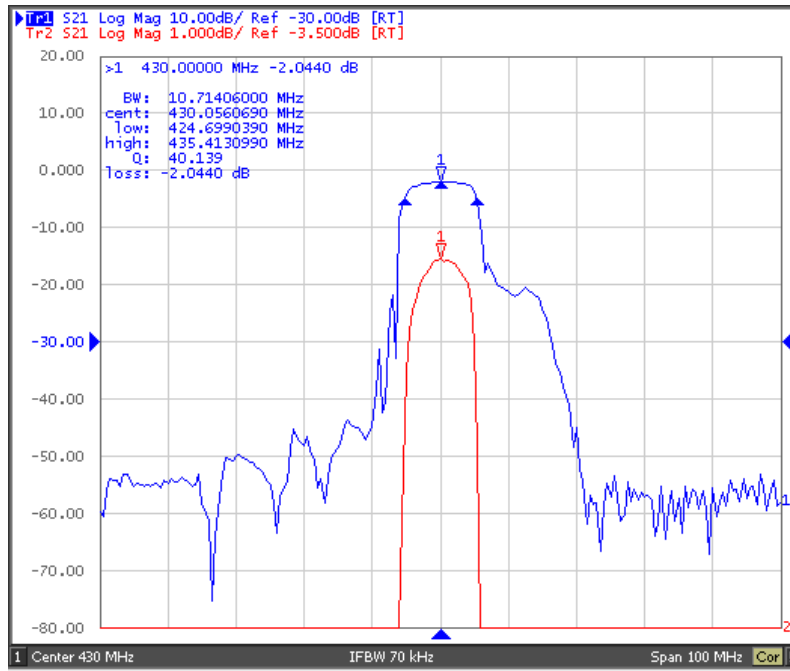
This specification shall cover the characteristics of SAW filter With 430MHz used for the page system.

### 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

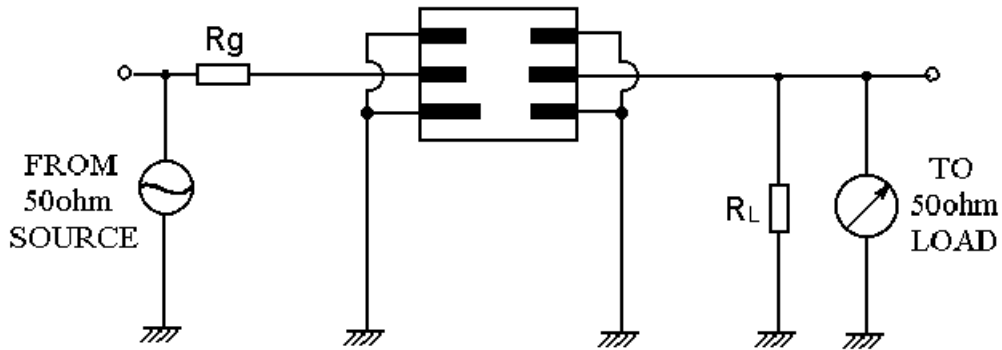
#### 2-1. Typical frequency response



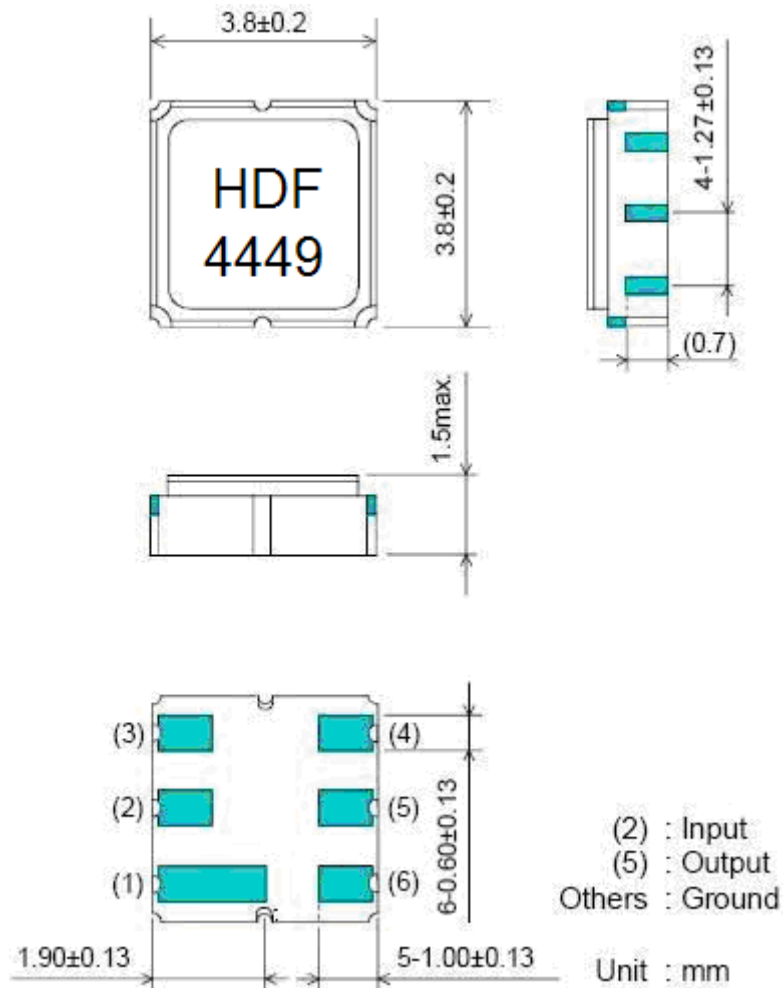
#### 2-2. Electrical characteristics

PART NUMBER	HDF430A	UNIT
NOMINAL CENTERFREQUENCY(Fo)	430.0	MHz
INSERTION LOSS:		
1. Fo-100MHz TO -39.5MHz	50.0 MIN	dB
2. Fo	4.0 MIN	
3. Fo+39.5 TO +100MHz	50.0 MIN	
3dB PASSWIDTH	7.0 MIN	MHz
RIPPLE (WITH PASSBAND)	2.0 MAX	dB
INPUT AND OUTPUT IMPEDANCE	50/0	Ω /pF

**3. TEST CIRCUIT**



**4. DIMENSION**



**Marking: HDF4449**

HD: Brand

F : Filter

4 : SMD-4

449 : No.

**5. ENVIRONMENTAL CHARACTERISTICS****5-1 Temperature cycling**

Subject the device to a low temperature of  $-40^{\circ}\text{C}$  for 30 minutes. Following by a high temperature of  $+25^{\circ}\text{C}$  for 5 Minutes and a higher temperature of  $+85^{\circ}\text{C}$  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 2-2.

**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  $10 \pm 1$  sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in 2-2.

**5-3 Solderability**

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 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 2-2.

**5-5 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 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

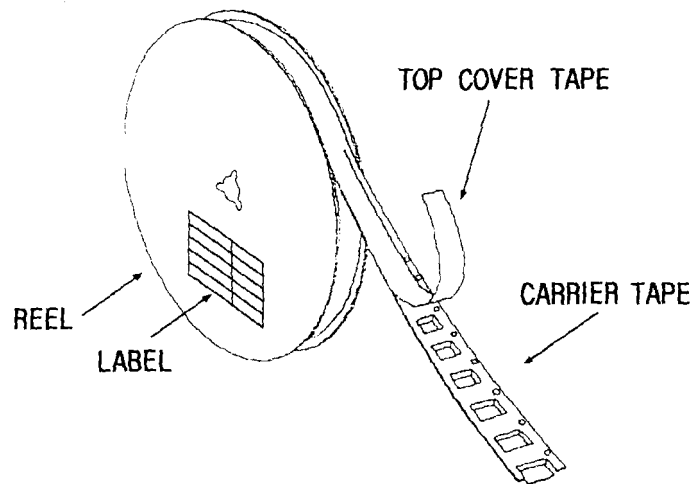
- (1) Carrier Tape: Figure 1
- (2) Reel: Figure 2
- (3) The product shall be packed properly not to be damaged during transportation and storage.

### 7.2 Reeling Quantity

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

### 7.3 Taping Structure

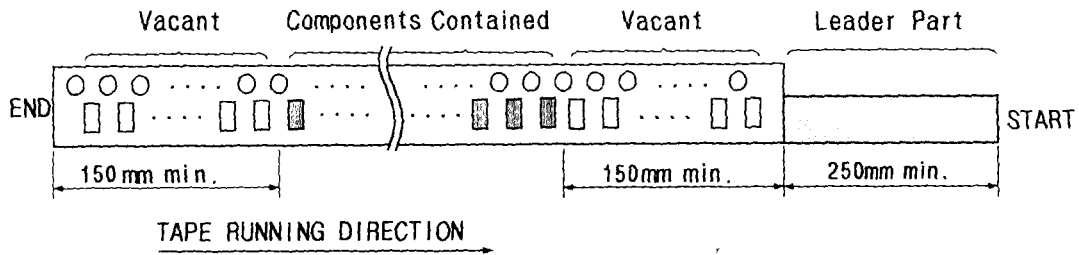
- (1) The tape shall be wound around the reel in the direction shown below.



- (2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

- (3) Leader part and vacant position specifications.

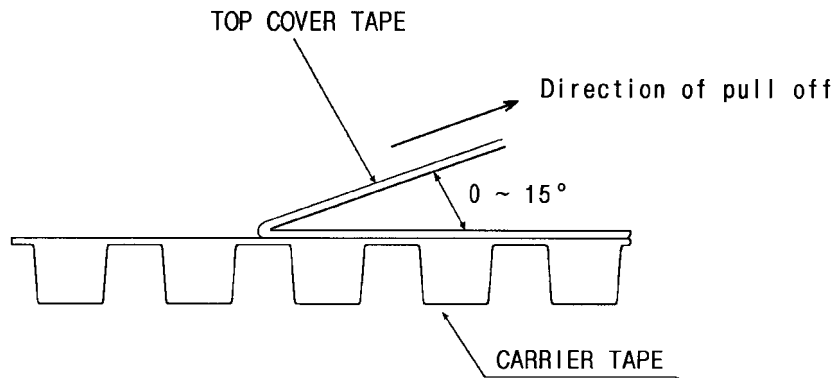


## 8. TAPE SPECIFICATIONS

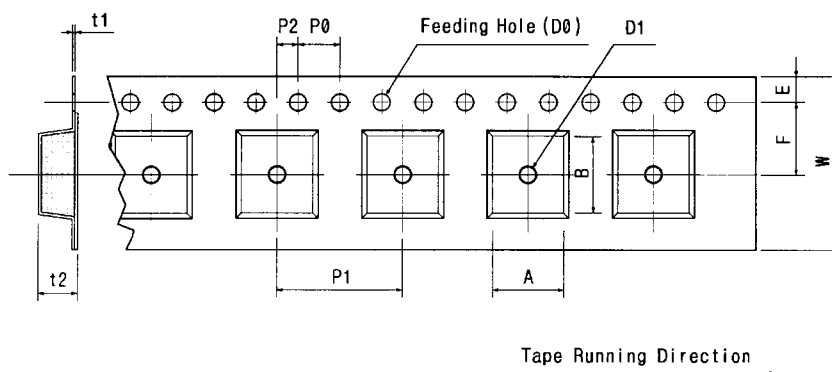
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

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

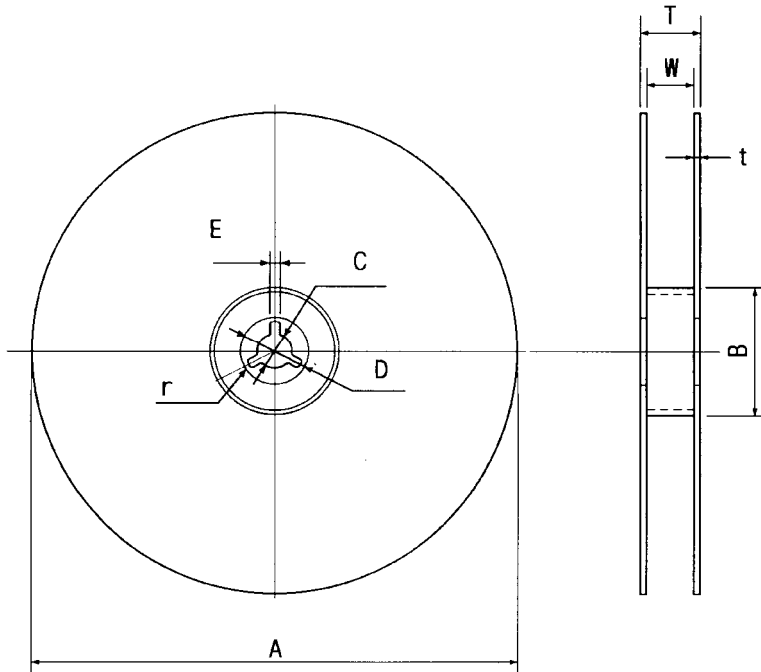


[Unit:mm]

W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.00	5.50	1.75	4.00	8.00	2.00	Ø1.50	Ø1.0	0.25	1.65	4.04	4.10
±0.30	±0.10	±0.10	±0.10	±0.10	±0.10		±0.25	±0.05	±0.10	±0.10	±0.10

[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.