SHOULDER

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：HDF302A-S3

PREPARED 编 制： CHECKED 审 核：

APPROVED 批 准： D A T E 日 期：2008-12-24

| 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 |
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# 1. SCOPE

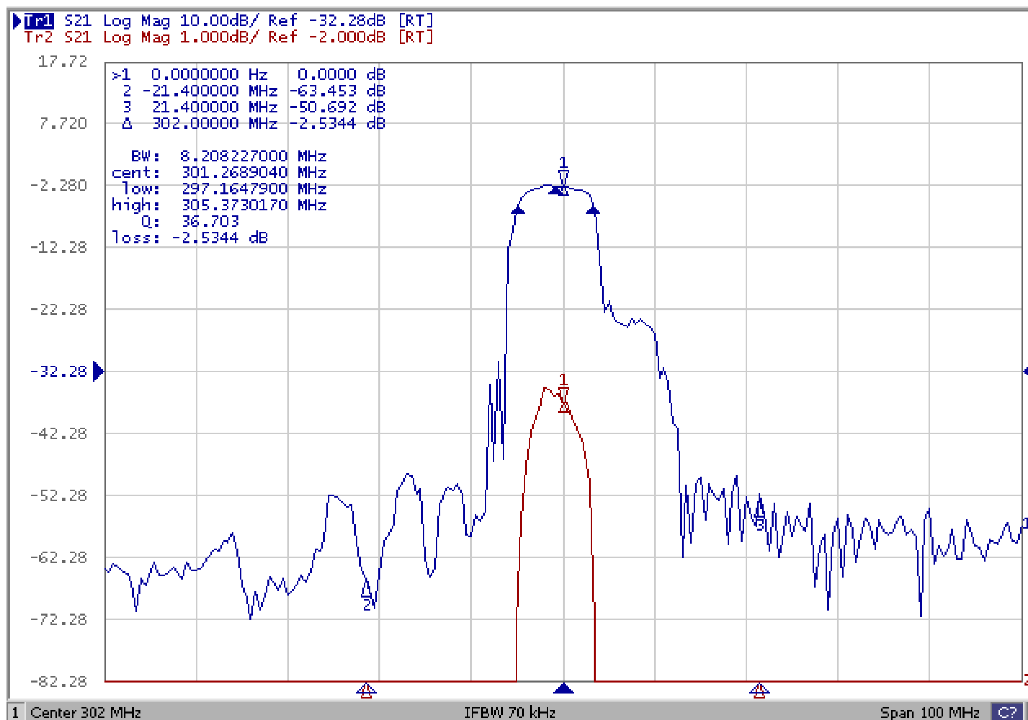
This specification shall cover the characteristics of SAW filter With HDF302A used for the page system.

# 2. ELECTRICAL SPECIFICATION

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

Electronic Characteristics

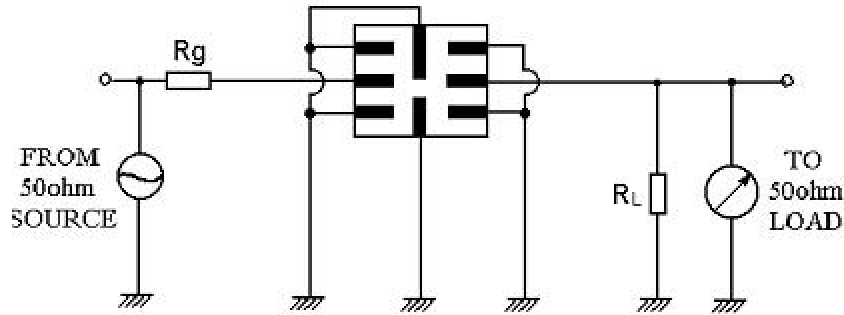
2-1.Typical frequency response



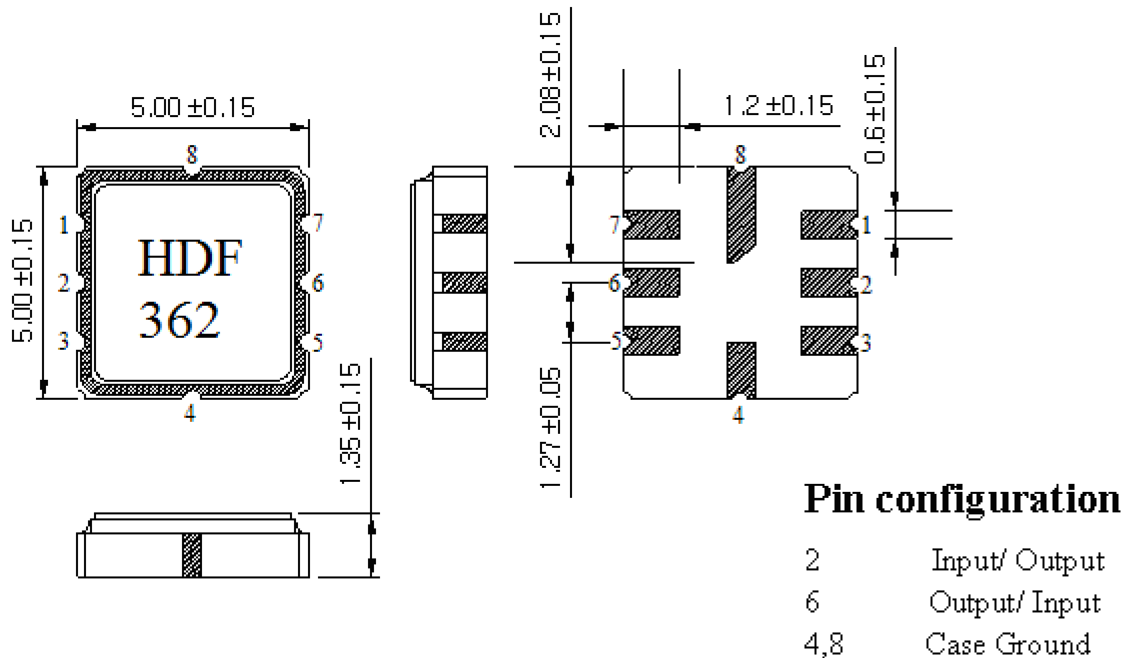

2-2.Electrical characteristics

| PART NUMBER | HDF302A | UNIT |
|---|---|---|
| NOMINAL CENTERREQUENCY(Fo) | 302.0 | MHz |
| INSERTION LOSS:<br>1. Fo-100MHz TO –39.5MHz<br>2. Fo±2.0 MHz<br>3. Fo+39.5 TO +100MHz | 50.0 MIN<br>4.0 MIN<br>50.0 MIN | dB |
| RIPPLE (WITH PASSBAND) | 2.0 MAX | dB |
| INPUT AND OUTPUT IMPEDANCE | 50/0 | Ω/pF |

## 3. TEST CIRCUIT




## 4. DIMENSION




## 5. ENVIRONMENTAL CHARACTERISTICS

5-1 High temperature exposure

Subject the device to +85℃ 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℃ 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℃ for 30 minutes. Following by a high temperature of +85℃ 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℃ ±10℃ 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℃ ±5℃ 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.

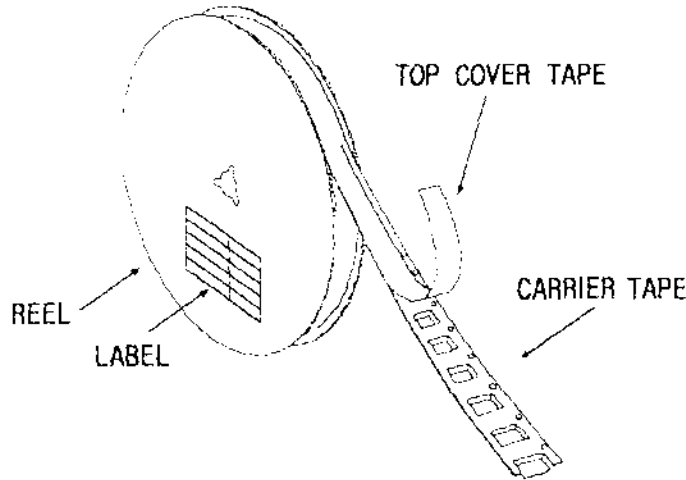
7.2 Reeling Quantity

1000 pcs/reel 7’’

3000 pcs/reel 13’’

7.3 Taping Structure

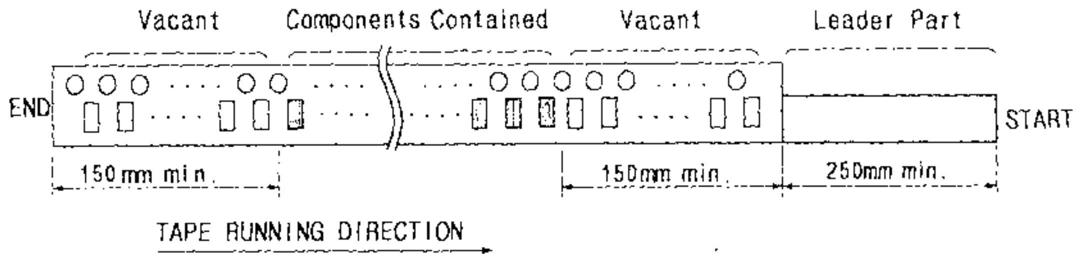
(1) The tape shall be wound around the reel in the direction shown below.




(2) Label

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

(3) Leader part and vacant position specifications.



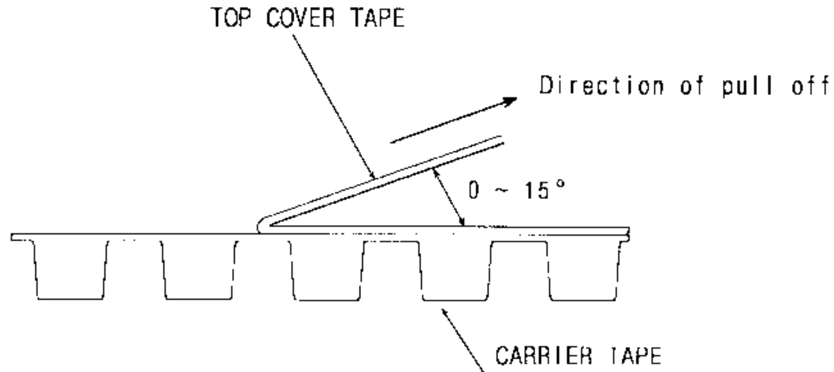

# 8. TAPE SPECIFICATIONS

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

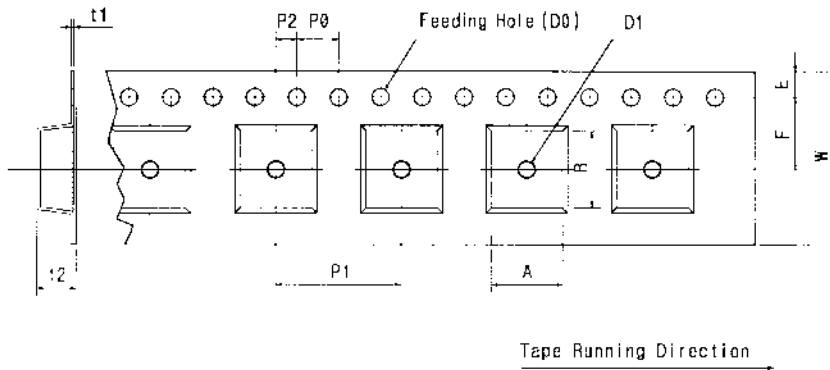
8.2 Top Cover Tape Adhesion (See the below figure)

(1) pull off angle: 0~15$^{o}$
(2) speed: 300mm/min.

(3) force: 20~70g




[Figure 1] Carrier Tape Dimensions

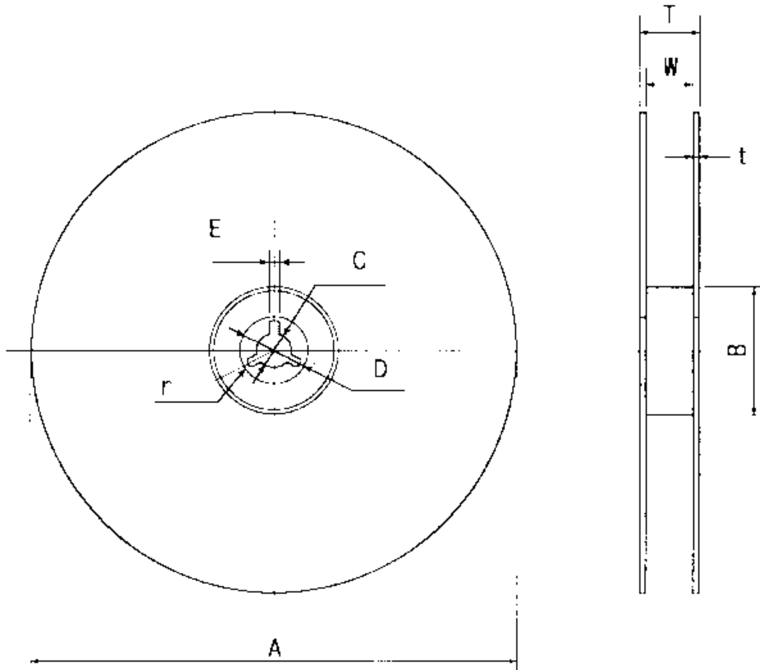



[Unit:mm]

| W | F | E | P0 | P1 | P2 | D0 | D1 | t1 | t2 | A | B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.0 ±0.3 | 5.5 ±0.05 | 1.75 ±0.1 | 4.0 ±0.1 | 8.0 ±0.1 | 2.0 ±0.05 | Ø1.5 ±0.1 | Ø1.0 ±0.25 | 0.3 ±0.05 | 2.10 ±0.1 | 6.40 ±0.1 | 5.20 ±0.1 |

[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. |