

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: _____ HDF163-S3 _____

MARKING 印字: _____ HDF104 _____

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

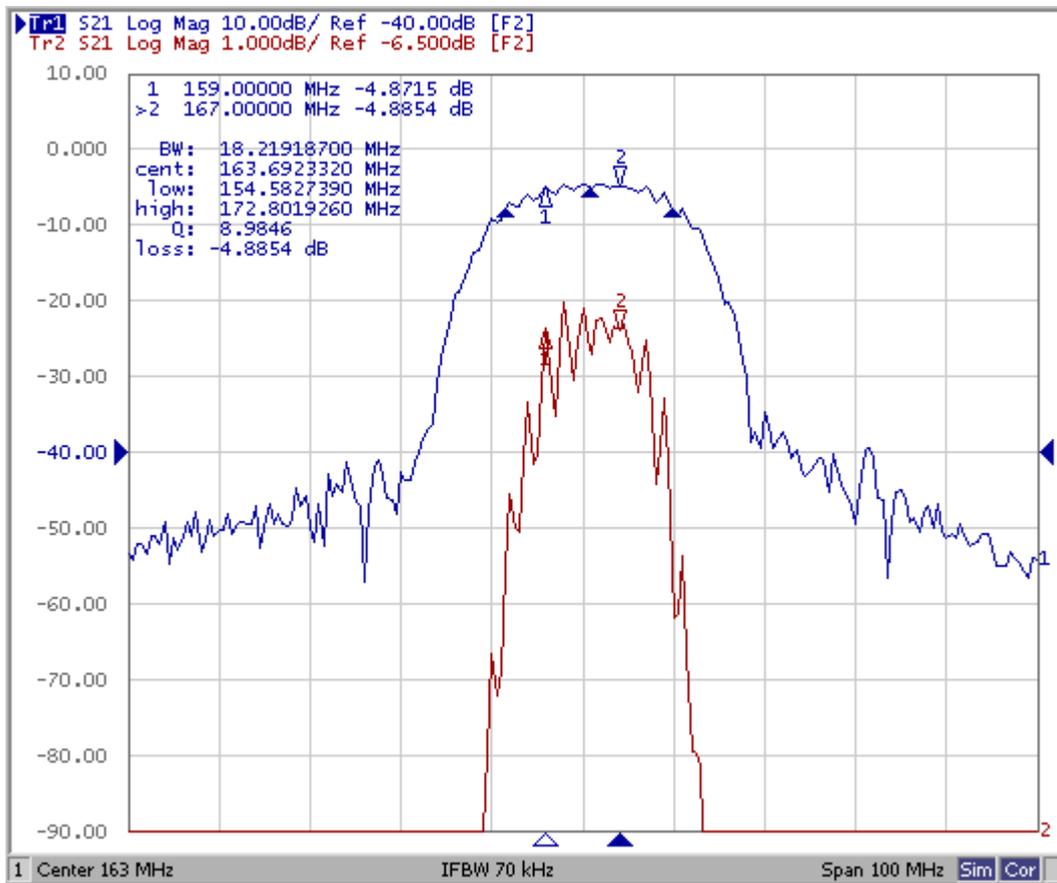
1. SCOPE

This specification shall cover the characteristics of SAW filter With F163 used for the page system.

2. ELECTRICAL SPECIFICATION

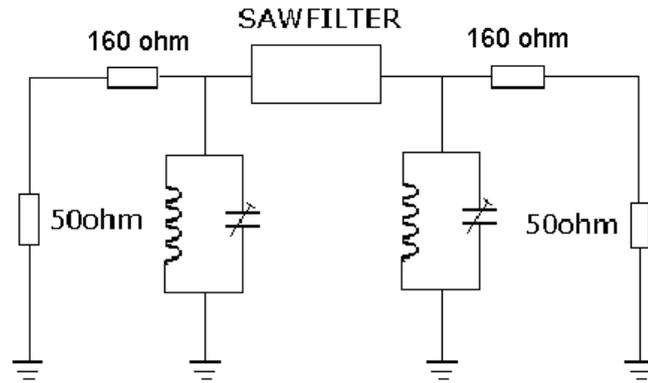
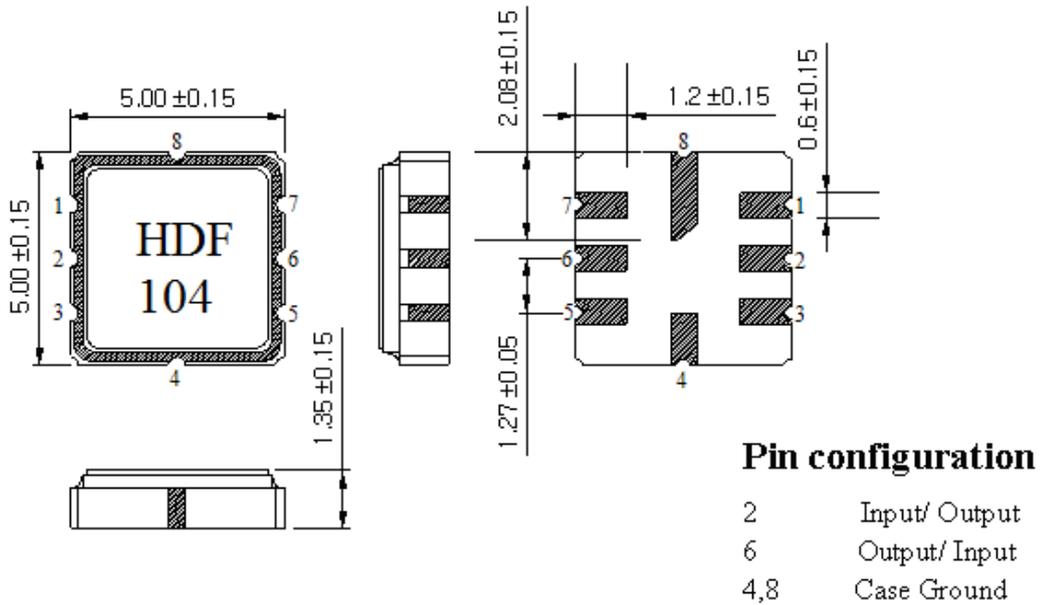
| | |
|-----------------------|----------------|
| DC Voltage VDC | 10V |
| AC Voltage Vpp | 10V50Hz/60Hz |
| Operation temperature | -40°C to +85°C |
| Storage temperature | -45°C to +85°C |
| RF Power Dissipation | 0dBm |

2-1. Typcal frequency response



2-2Electrical characteristics

| | | |
|---------------------------------|-------------|-------|
| Part number | HDF163 | Unit |
| Nominal center frequency (Fo) | 163 | MHz |
| Insertion Loss(Fo ± 4MHz) | 6.5max | dB |
| Fo -100MHz to Fo -46.8MHz | 50min | dB |
| Fo -46.8MHz to Fo-38.8MHz | 50min | dB |
| Fo ± 38.8MHz to 2.5×Fo | 42min | dB |
| Input/Output Impedance(Nominal) | 210// -12.3 | Ω /pF |

3. TEST CIRCUIT

4. DIMENSION

Marking: HDF104

HD: Brand

F : Filter

104 : No.

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

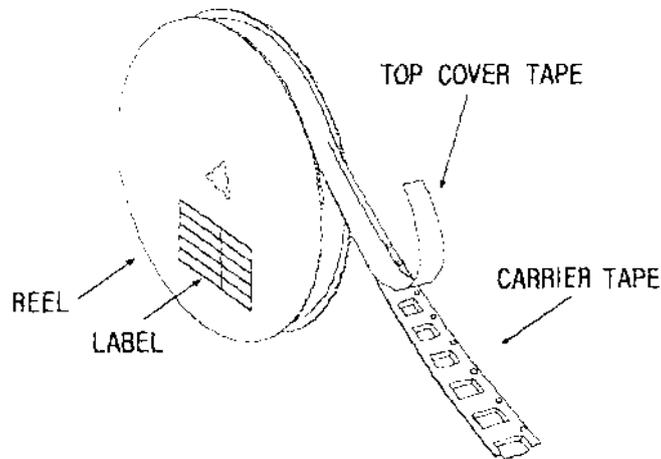
- (1) Carrier Tape: Figure 1
- (2) Reel: Figure 2
- (3) The product shall be packed properly not to be damaged during transportation and storage.

7.2 Reeling Quantity

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

7.3 Taping Structure

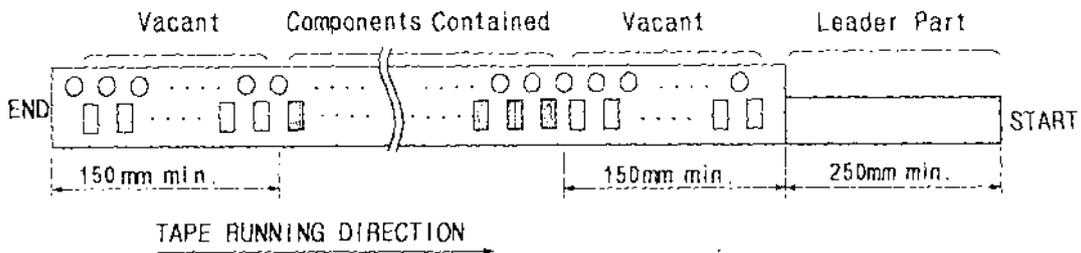
- (1) The tape shall be wound around the reel in the direction shown below.



- (2) Label

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

- (3) Leader part and vacant position specifications.

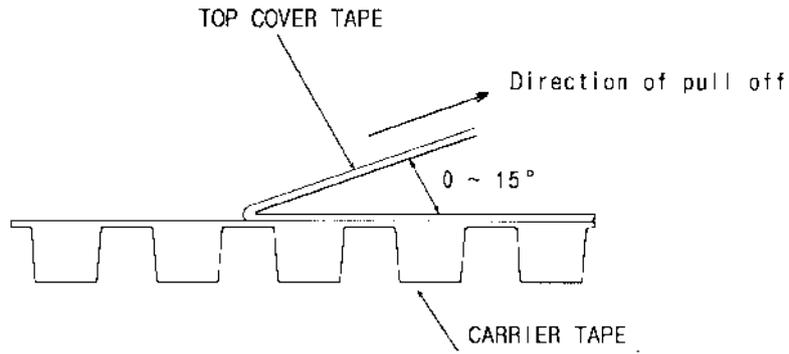


8. TAPE SPECIFICATIONS

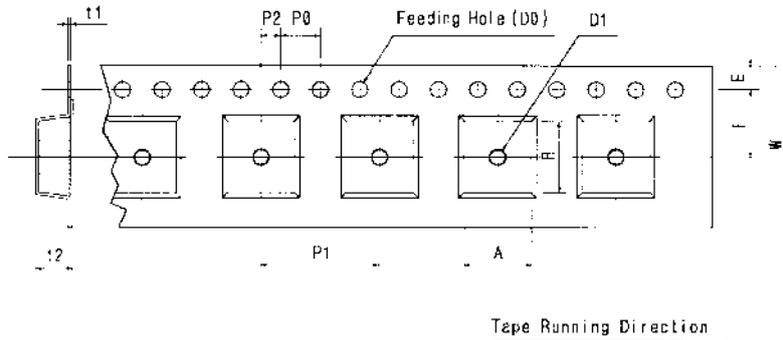
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

8.2 Top Cover Tape Adhesion (See the below figure)

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



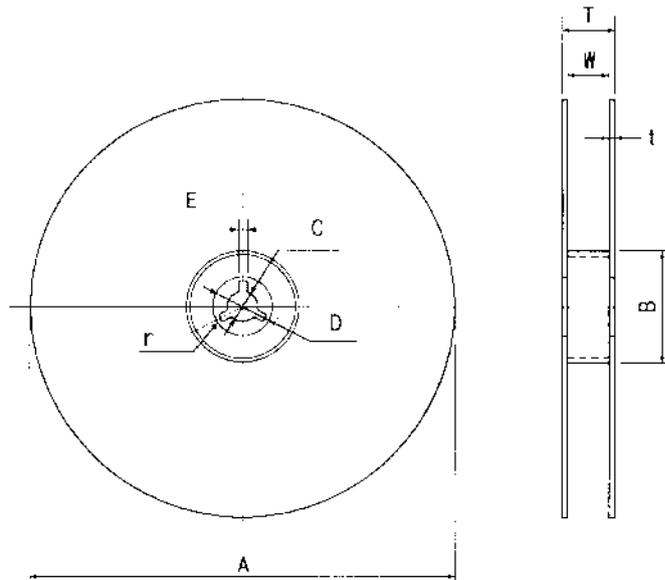
[Figure 1] Carrier Tape Dimensions



[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. |