**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 : HDF135-8 F16

PREPARED 编 制 : CHECKED 审 核 :

APPROVED 批 准 : DATE 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 |
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# 1. SCOPE

This specification shall cover the characteristics of SAW filter F110T

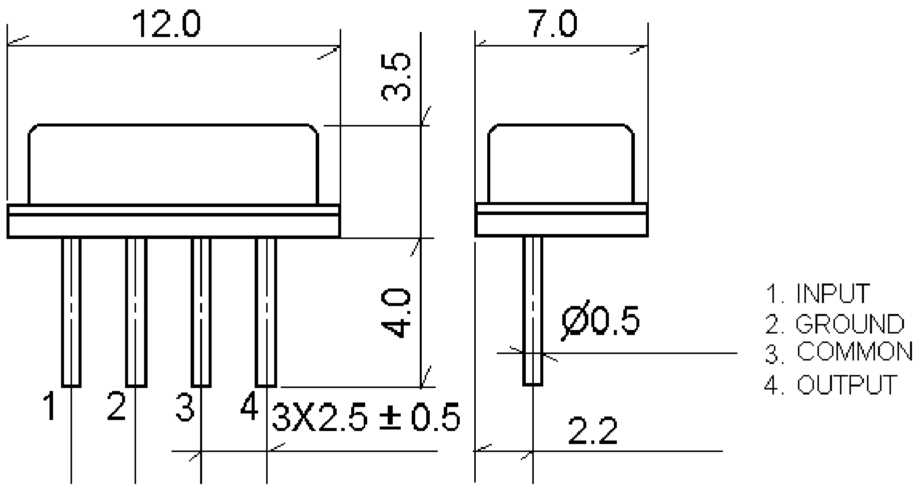
# 2. ELECTRICAL SPECIFICATION

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

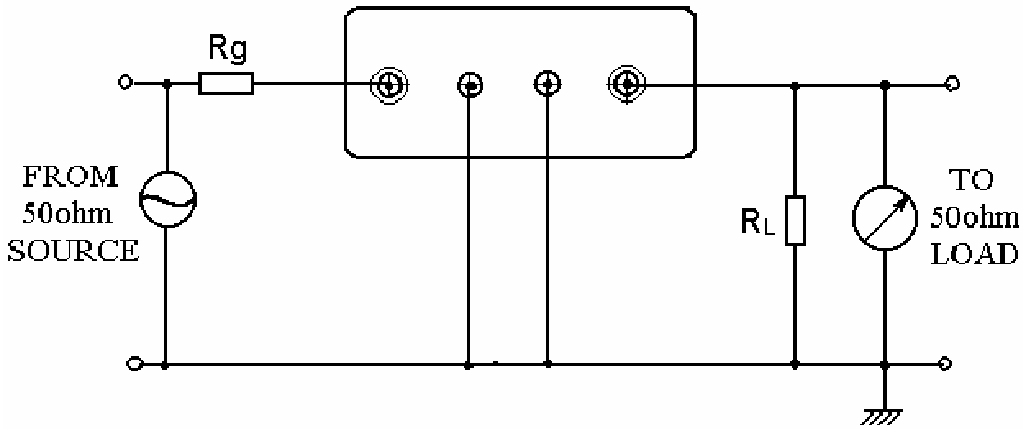
2.2Electronic Characteristics

| Description | min | type | max | unit |
|---|---|---|---|---|
| Center frequency(3dB) Fo | 134.5 | 135.0 | 135.5 | MHz |
| Insertion loss | - | - | 18 | dB |
| 3dB Pass width | 7.2 | - | - | MHz |
| Stop band attenuation | 45 | - | - | dB |

# 3. DIMENSION



# 4.TEST CIRCUIT



# 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.

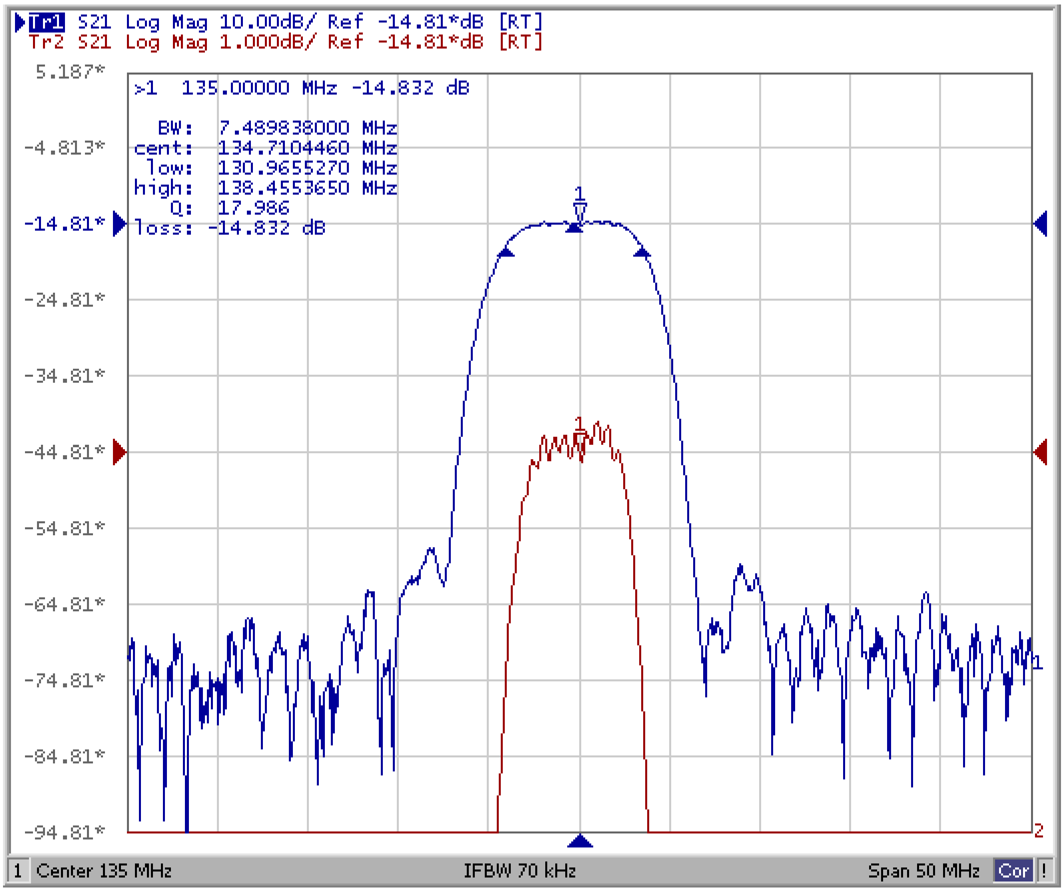
5-6 Mechanical shock

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.Typical frequency response



```
Tr1 S21 Log Mag 10.00dB/ Ref -14.81*dB [RT]
Tr2 S21 Log Mag 1.000dB/ Ref -14.81*dB [RT]

>1  135.00000 MHz -14.832 dB

  BW:  7.489838000 MHz
cent:  134.7104460 MHz
 low:  130.9655270 MHz
high:  138.4553650 MHz
   Q:  17.986
loss: -14.832 dB
```

# 7. REMARK

7.1 Static voltage

Static voltage between signal load & ground may cause deterioration &destruction of the component. Please avoid static voltage.

7.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning

7.3 Soldering

Only leads of component may be soldered. Please avoid soldering another part of component.