

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: HDF135T SMD-24  
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



### 1. SCOPE

This specification shall cover the characteristics of SAW filter F135T

### 2. ELECTRICAL SPECIFICATION

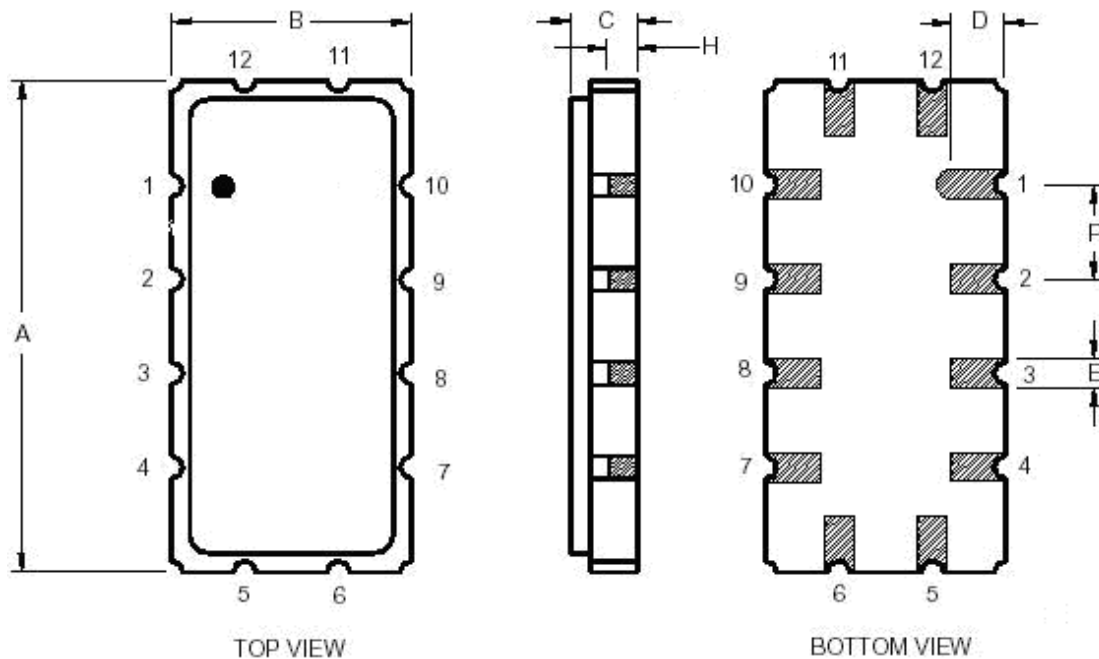
|                       |                |
|-----------------------|----------------|
| DC Voltage VDC        | 10V            |
| AC Voltage Vpp        | 10V50Hz/60Hz   |
| Operation temperature | -40°C to +85°C |
| Storage temperature   | -45°C to +85°C |
| RF Power Dissipation  | 0dBm           |

#### 2.2 Electronic Characteristics

| Item                            | Min.  | Typ.       | Max.     |
|---------------------------------|-------|------------|----------|
| Insertion Loss(reference level) |       | 23.0 dB    |          |
| Center frequency (3dB)          |       | 135.42 MHz |          |
| Pass band shape(3 dB-BW)        |       |            | Gaussian |
| 3 dB bandwidth                  |       | 23.0 MHz   | -        |
| Relative attenuation            |       |            |          |
| Fc-50MHz- fc-15MHz              | 32 dB |            |          |
| Fc+15MHz – fc+50MHz             | 32 dB |            |          |
| Temperature coefficient         |       | 85 ppm/K   |          |

**This filter can be used in single-end Input/Output or Balanced.**

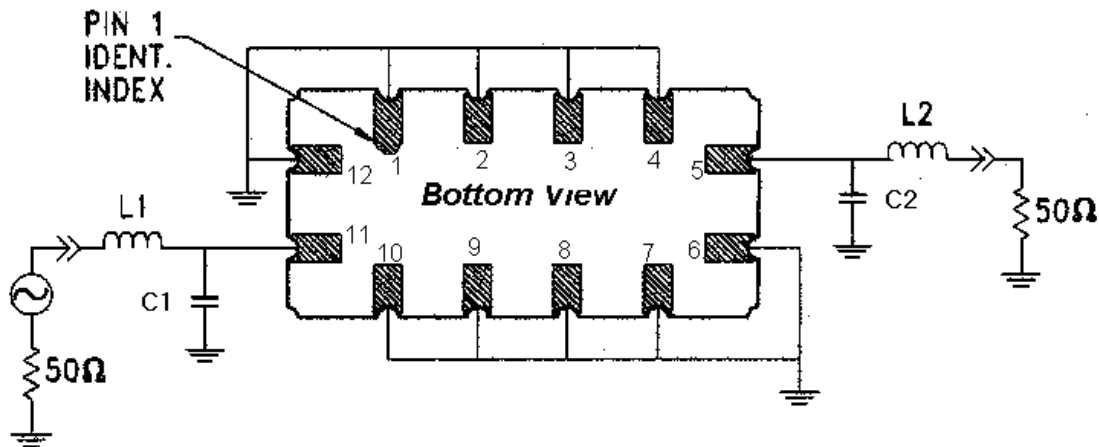
### 3. DIMENSION



| Dimension | mm   |      |      |
|-----------|------|------|------|
|           | min  | typ  | max  |
| A         | 13.1 | 13.3 | 13.5 |
| B         | 6.3  | 6.5  | 6.7  |
| C         | 1.21 | 1.36 | 1.51 |
| D         |      | 1.5  |      |
| E         |      | 0.8  |      |
| H         | 0.72 | 0.76 | 0.80 |
| P         |      | 2.54 |      |

| Pin Configuration |        |
|-------------------|--------|
| 11                | Input  |
| 5                 | Output |
| Other             | Ground |

### 4. TEST CIRCUIT



$L1=L2=0nH, C1=3.0pF, C2=2.7pF$

- Pin: 11. Input**
- 12. Input (balance) or Ground**
- 1, 2, 3, 4, 7, 8, 9, 10. Ground**
- 5. Output**
- 6. Output (balance) or Ground**

### 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°C ±5°C for 5s, More than 95% area of the terminals must be covered with new solder. It shall meet the specifications in 2.2.

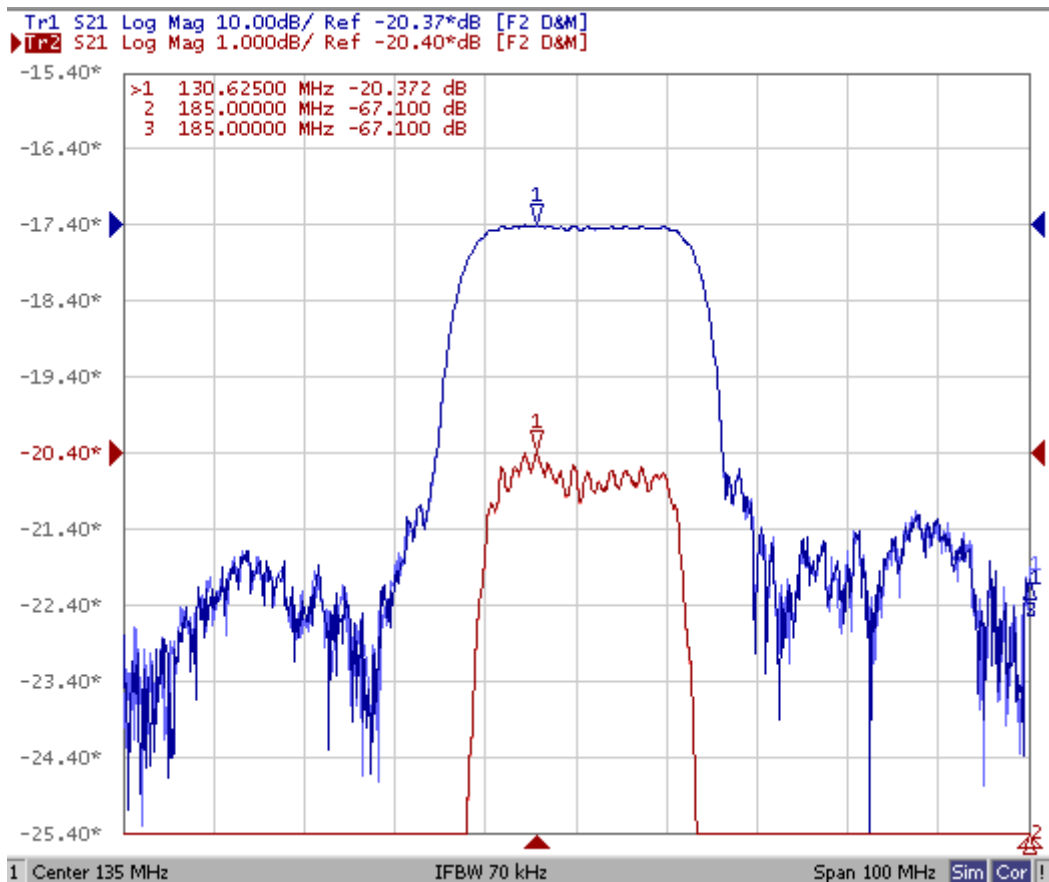
5-6 Mechanical shock

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.

**Typical frequency response**



**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.