

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: \_\_\_\_\_ 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 F135T

### 2. ELECTRICAL SPECIFICATION

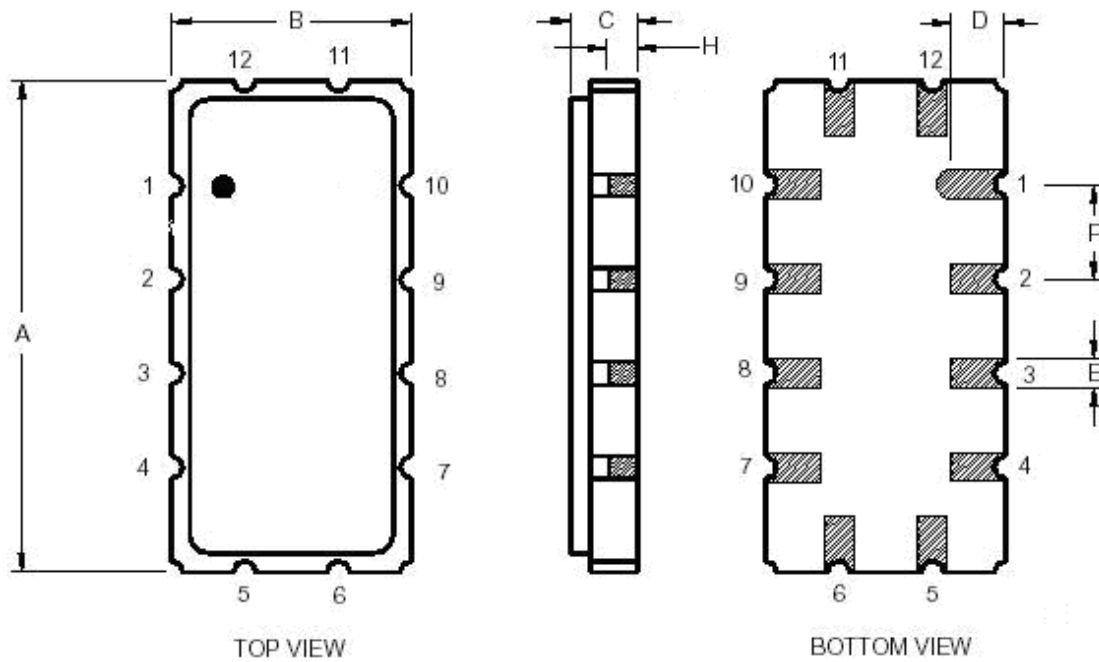
DC Voltage VDC	10V
AC Voltage Vpp	10V50Hz/60Hz
Operation temperature	-40°C to +85°C
Storage temperature	-45°C to +85°C
RF Power Dissipation	0dBm

#### 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.**

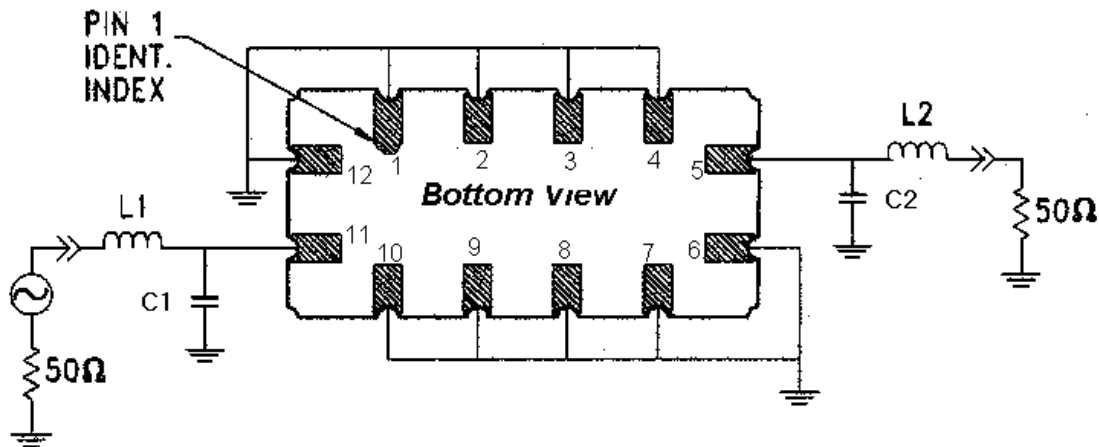
### 3. DIMENSION



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  $260^{\circ}\text{C} \pm 10^{\circ}\text{C}$  for  $10 \pm 1$  sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in 2.2.

**5-5 Solderability**

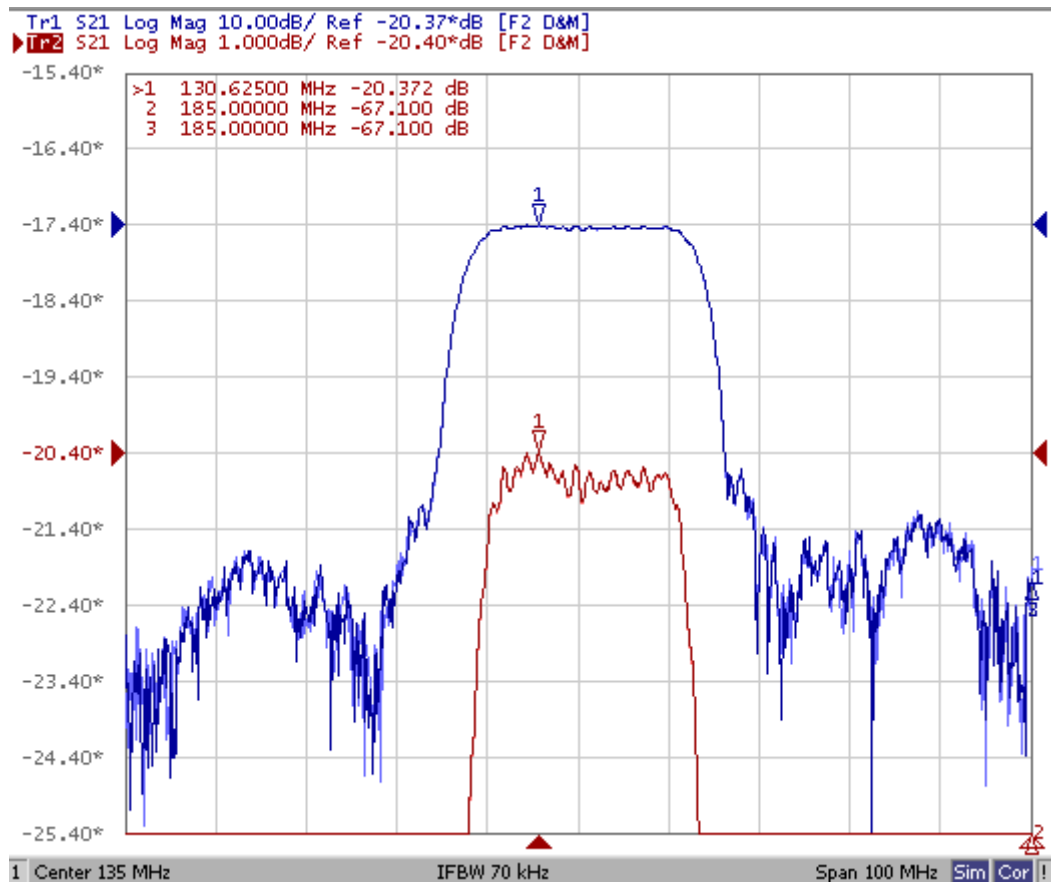
Subject the device terminals into the solder bath at  $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$  for 5s, More than 95% area of the terminals must be covered with new solder. It shall meet the specifications in 2.2.

**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.