

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： \_\_\_\_\_ HDBF09620A24 SMD-24 \_\_\_\_\_  
PREPARED 编制： \_\_\_\_\_ CHECKED 审核： \_\_\_\_\_  
APPROVED 批准： \_\_\_\_\_ DATE 日期： \_\_\_\_\_ 2010-7-21 \_\_\_\_\_

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 with HDBF09620A24 used for the page system.

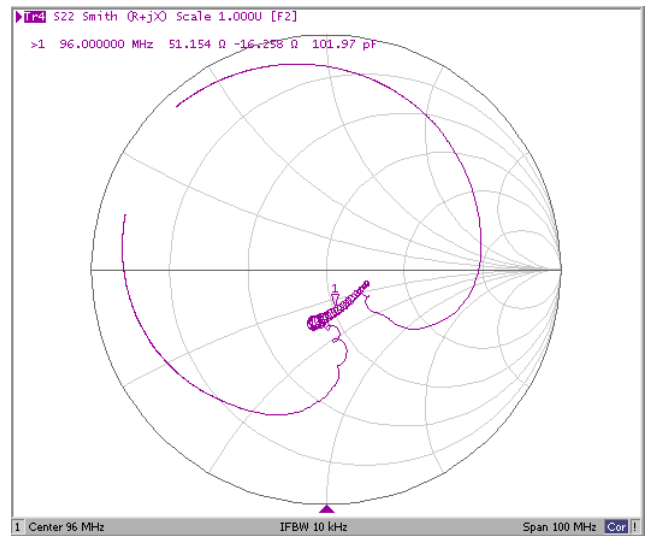
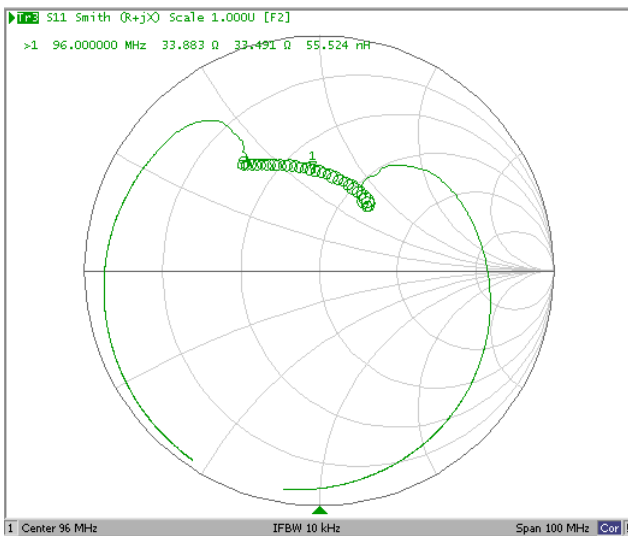
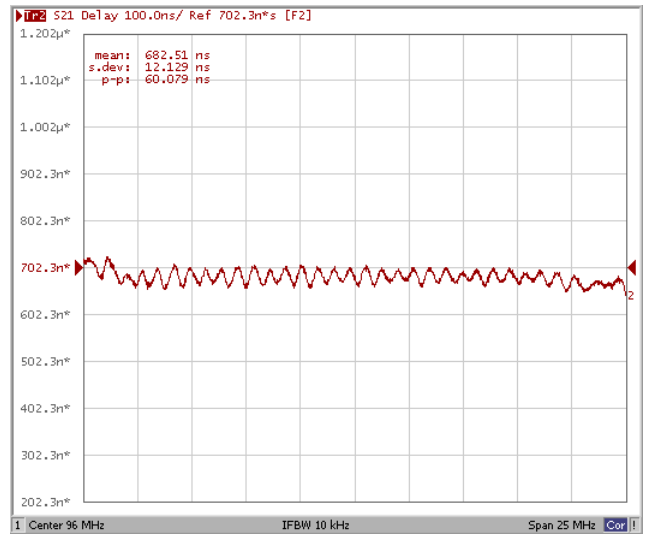
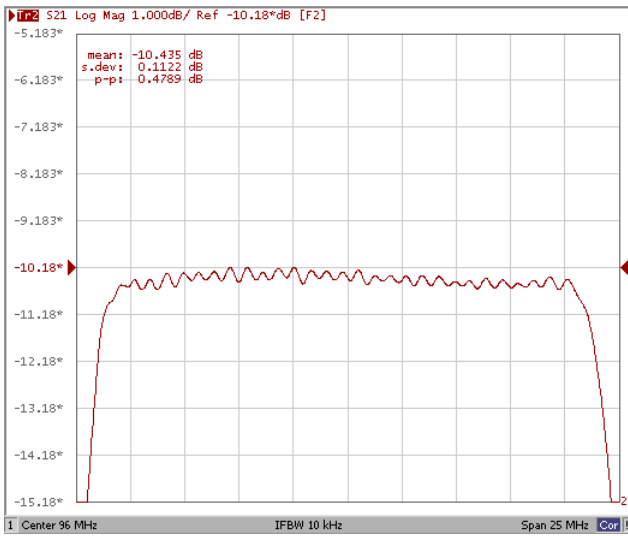
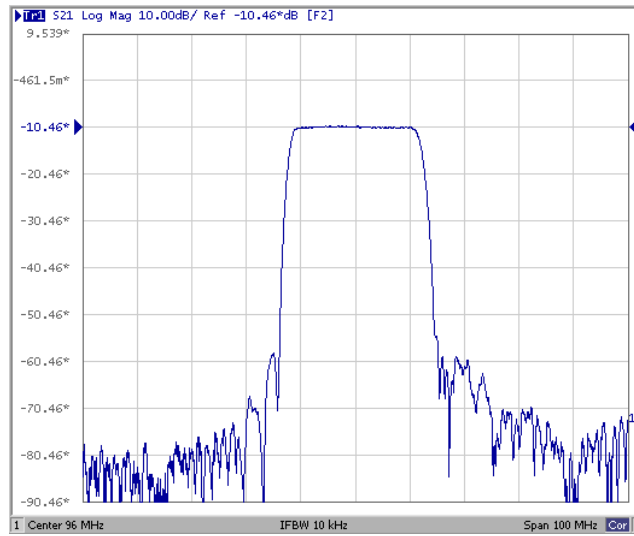
## 2. ELECTRICAL SPECIFICATION

Max.DC voltage between any 2 terminals	30VDC
Storage temperature range	-40°C to +85°C
Operation temperature range	-40°C to +85°C
Maximum Input Power	10dBm

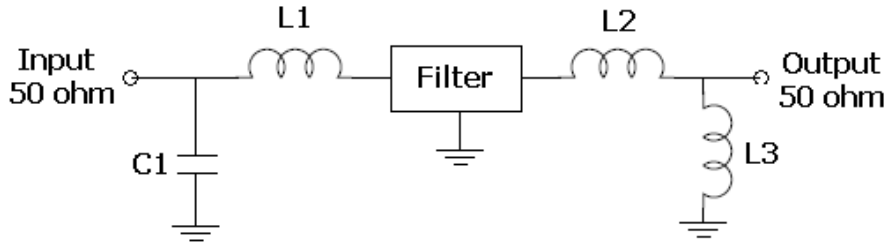
### 2.2 Electronic Characteristics

Item	Requirement			Unit
	Min.	Typical.	Max.	
Nominal center Frequency	-	96	-	MHz
Insertion loss (86.0MHz~106.0MHz)	-	9.5	12	dB
-1dB Bandwidth	-	22.0	-	MHz
-40dB Bandwidth	-	28.3	-	MHz
Relative attenuation				
0MHz ~68.4MHz	51	60		dB
76.8MHz	40	50	-	
123.6MHz~162.8MHz	56	63		
162.8MHz~1000MHz	35	45		
Amplitude ripple (86.0MHz~106.0MHz)		0.65	1.2	dB
Group delay ripple (86.0MHz~106.0MHz)		60	100	ns
Input IP3	35	45		dBm
VSWR		3		
Temperature Coefficient			-86	ppm/°C

Typical frequency response



**3. TEST CIRCUIT**

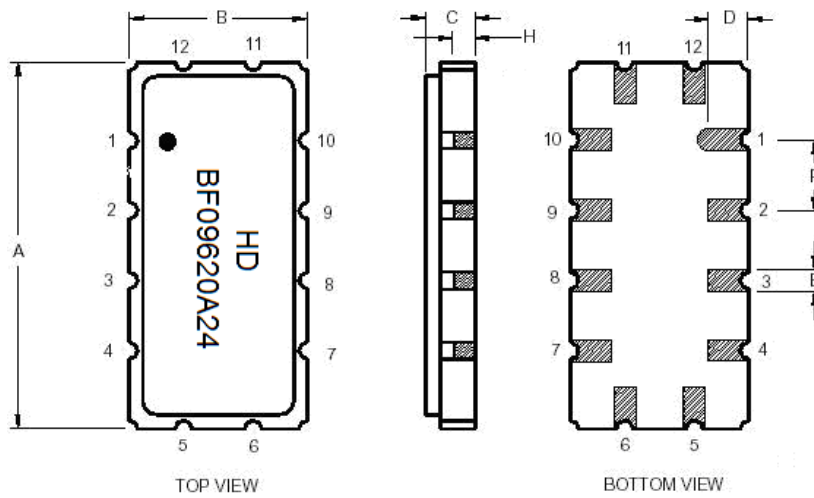


Input : L1 = 82 nH , C1 = 39 pF

Output : L2 = 27 nH , L3 =56 nH

(Notes: Component values may change depending on board layout)

**4.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

## **5. ENVIRONMENTAL CHARACTERISTICS**

### 5-1 Temperature cycling

Subject the device to a low temperature of  $-40^{\circ}\text{C}$  for 30 minutes. Following by a high temperature of  $+25^{\circ}\text{C}$  for 5 Minutes and a higher temperature of  $+85^{\circ}\text{C}$  for 30 Minutes. Then release the device into the room conditions for 1 to 2 hours prior to the measurement. It shall meet the specifications in 2.2.

### 5-2 Resistance to solder heat

Submerge the device terminals into the solder bath at  $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$  for  $10 \pm 1$  sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in 2.2.

### 5-3 Solderability

Submerge 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 soldering pad must be covered with new solder. It shall meet the specifications in 2.2.

### 5-4 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1 m 3 times. the filter shall fulfill the specifications in 2.2.

### 5-5 Vibration

Subject the device to the vibration for 2 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 hz. The filter 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.