

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： \_\_\_\_\_ HDBF07016A24 SMD-24 \_\_\_\_\_  
PREPARED 编制： \_\_\_\_\_ 俞虹 \_\_\_\_\_ CHECKED 审核： \_\_\_\_\_ 邓攀 \_\_\_\_\_  
APPROVED 批准： \_\_\_\_\_ 倪山林 \_\_\_\_\_ DATE 日期： \_\_\_\_\_ 2010-12-30 \_\_\_\_\_

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 HDBF07016A24 used for the page system.

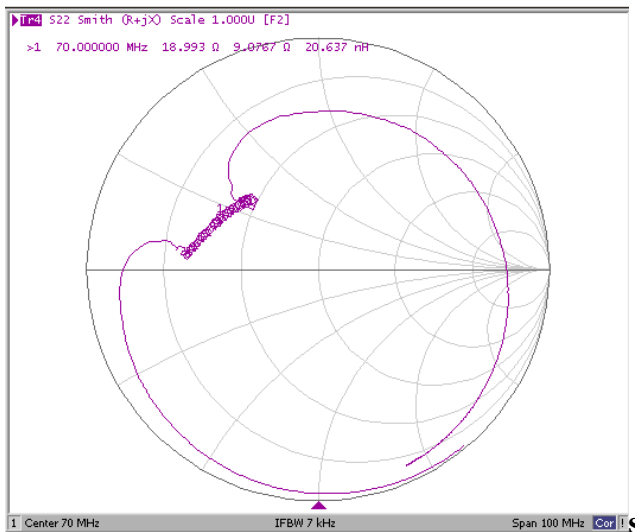
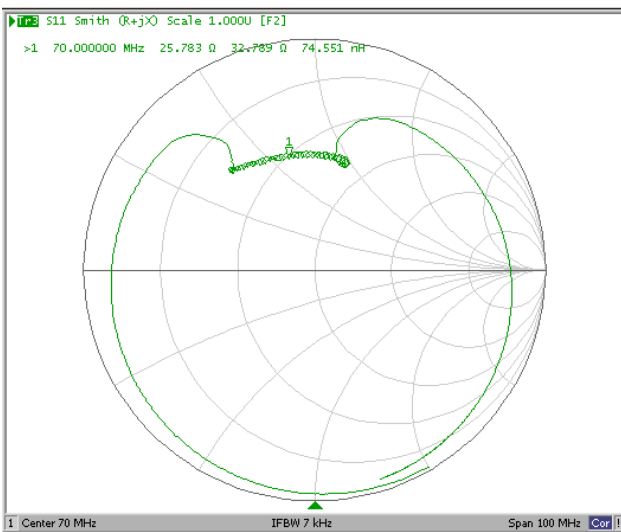
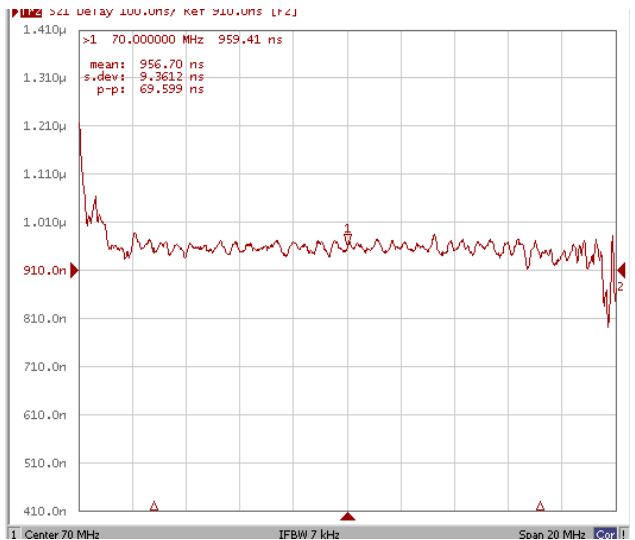
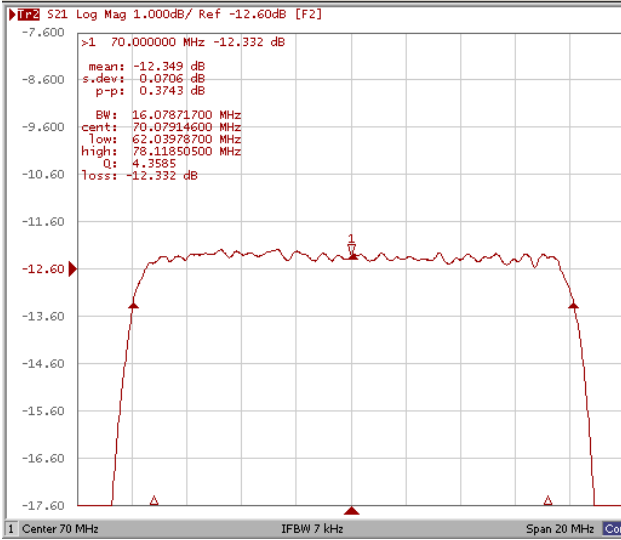
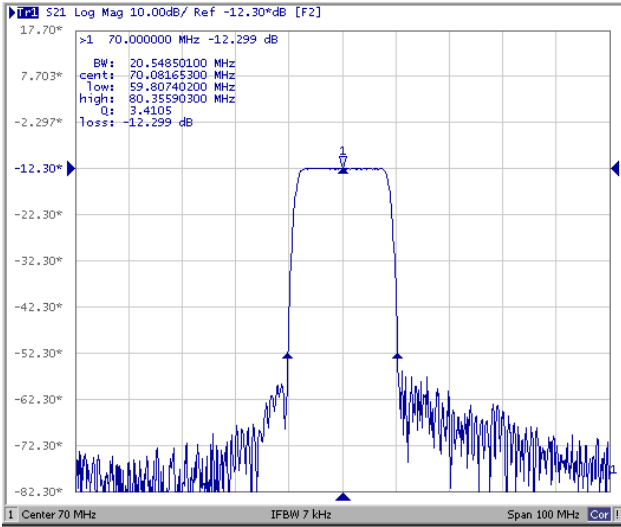
## 2. ELECTRICAL SPECIFICATION

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

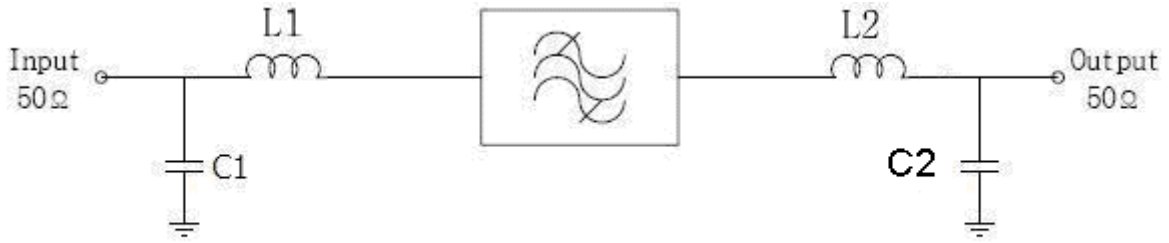
### Electronic Characteristics

Parameter	Min.	Typical.	Max.	Unit
Center Frequency	69.8	70	70.2	MHz
Insertion loss		12.5	13.5	dB
-1 dB Bandwidth	15.5	16	-	MHz
-3 dB Bandwidth	16	16.9		MHz
-40 dB Bandwidth		21.2	22	MHz
Passband Variation		0.4	1.0	dB
Absolute Delay		0.96		us
Group delay Variation (F0 +/- 12MHz)		70	100	ns
Phase Linearity (F0 +/- 12MHz)		2.5	11.5	deg
Ultimate Rejection (Over F0 +/- 20MHz)	40	44		dB
Temperature Coefficient		-86		ppm/°C
Package Size	SMD 13.3mm*6.5mm			

**Typical frequency response**



**3. TEST CIRCUIT**

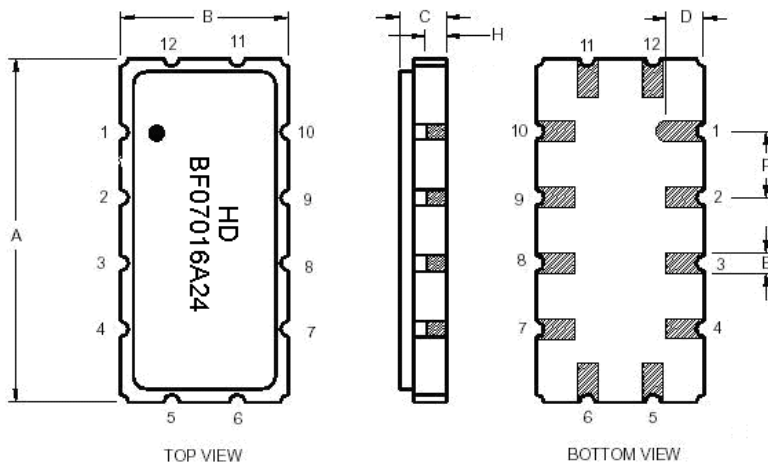


$L1 = L2 = 150 \text{ nH}$

$C1 = C2 = 30 \text{ pF}$

\* 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 table 1.

### 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 table 1.

### 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 table 1.

### 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 table 1.

### 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 table 1.

## 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.