## **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:	HDF140C F12	
PREPARED 编 制:	CHECKED 审核:	
APPROVED 批 准:	DATE 日 期:	2005-4-22

客户确认 CUSTOMER RECEIVED:				
审核 CHECKED	批准 APPROVED	日期 DATE		

## 无锡市好达电子股份有限公司 Shoulder Electronics Limited

# SAW FILTER

#### HDF140C F12

## 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

## SAW FILTER

### 1. SCOPE

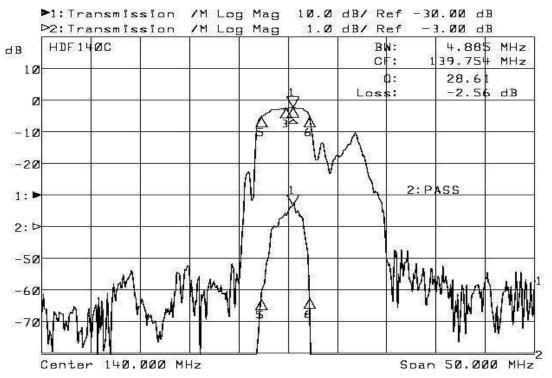
This specification shall cover the characteristics of SAW filter With F140C used for the page system.

### 2. ELECTRICAL SPECIFICATION

DC Voltage VDC	10V
AC Voltage Vpp	10V50Hz/60Hz
Operation temperature	-20°C to +60°C
Storage temperature	-45°℃ to +85°℃
<b>RF</b> Power Dissipation	0dBm

**Electronic Characteristics** 

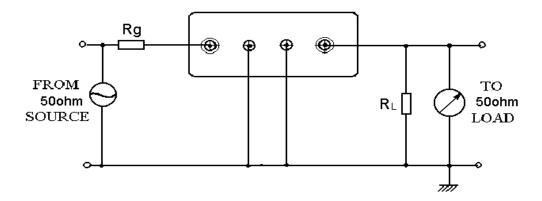
#### 2-1. Typical frequency response



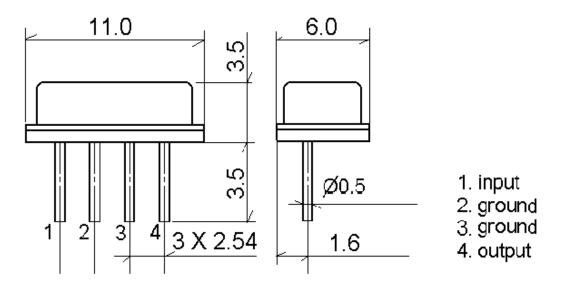
2-2.Electrical characteristics

Part Number	F140C	Unit
Nominal center frequency(Fo)	140.0	MHz
Insertion (Fo)		
1. DC.~Fo-10.7MHz	-40 min	
2. Fo	-4.5 min	dB
3. Fo+10.7MHz~100MHz	-40 min	
Passband width(at -3.0dB	$\geq \pm 2.0$ typ.	MHz
Ripple(within passband)	2.0 min	dB
Input/Output impedance(Nominal)	50//0	$\Omega //pF$

### **3. TEST CIRCUIT**



#### **4. DIMENSION**



### **5. ENVIRONMENTAL CHARACTERISTICS**

5-1 High temperature exposure

Subject the filter to  $+80^{\circ}$ C for 96 hours. Then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in table 1.

5-2 Moisture

Keep the filter at  $40^{\circ}$ C and 95% rh for 96 hours. then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in table 1.

5-3 Low temperature exposure

Subject the filter to  $-20^{\circ}$ C for 96 hours. Then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in table 1.

## SAW FILTER

#### 5-4 Temperature cycling

Subject the filter to a low temperature of  $-55^{\circ}$ C for 30 minutes. Following by a high temperature of  $+85^{\circ}$ C for 30 Minutes. Then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall meet the specifications in table 1.

5-5 Resistance to solder heat

Dip the filter terminals no closer than 1.5mm into the solder bath at  $270^{\circ}$ C  $\pm 10^{\circ}$ C for  $10\pm 1$  sec. Then release the Filter into the room conditions for 1 to 2 hours. The Filter shall meet the specifications in table 1.

5-6 Mechanical shock

Drop the filter randomly onto the concrete floor from the height of 30cm 3 times. the filter shall fulfill the specifications in table 1.

#### 5-7 Vibration

Subject the filter 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 filter shall fulfill the specifications in table 1.

5-8 Lead fatigue

6-8-1 Pulling test

Weight along with the direction of lead without an shock 3 kg. The filter shall satisfy all the initial Characteristics.

6-8-2 Bending test

Lead shall be subject to withstand against  $90^{\circ}$ C bending in the direction of thickness. This operation shall be done toward both direction. The filter shall show no evidence of damage and shall satisfy all the initial electrical characteristics.

### 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.