

CUSTOMER 客户.

规格书编号

**SPEC NO:** 

# 产品规格书 SPECIFICATION

PRODUCT 产品:	SAW FILTER						
MODEL NO 型 号:	HDF112T F11						
PREPARED 编 制:	CHECKED 审 核:						
APPROVED 批准:	<b>DATE</b> 日	月: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



SAW FILTER HDF112T F11

## 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 F112T.

## 2. ELECTRICAL SPECIFICATION

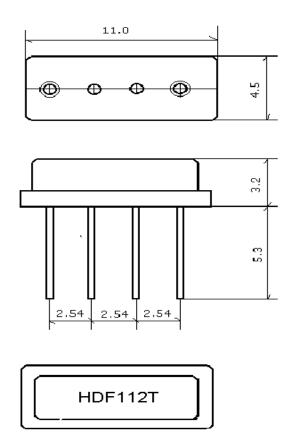
DC Voltage VDC	10V	
AC Voltage Vpp	10V50Hz/60Hz	
Operation temperature	-40°C to +85°C	
Storage temperature	-45°C to +85°C	
RF Power Dissipation	0dBm	

#### 2.2 Electronic Characteristics

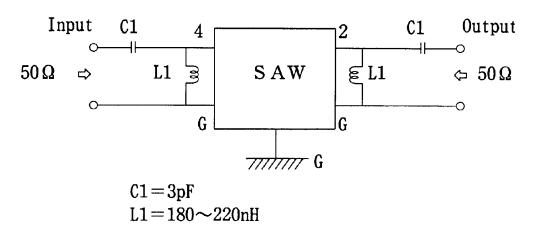
Item		Typ.value	Tolerance/Limit
Insertion Loss(reference level)	Ae=amin	13.0 dB	15.0 dB
Reference frequency	Fc(30dB-BW)	112.32 MHz	±150 kHz
Pass band shape(3 dB-BW)		$\pm 576 \mathrm{KHz}$	Gaussian
Relative attenuation	Arel		
Fc±1.728MHz			≪-30dB
Fc±3.456MHz			≤-45dB
Fc±5.184MHz			≥-50dB
Group delay fc±576kHz	GD		$\pm 100$ ns max
Temperature coefficient Tc 1 <sup>st</sup> order		+1.7 ppm/K	
Tc 2st order		-0.06 ppm/K	
Drive /Load impedance		50 Ω	



### 3. DIMENSION



## 4.TEST CIRCUIT



#### 5. ENVIRONMENTAL CHARACTERISTICS

#### 5-1 High temperature exposure

Subject the filter to  $+85^{\circ}$ 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 2.2. 5-2 Moisture

Keep the filter at 40°C and 95% rh for 96 hours, then release the filter into the



SAW FILTER HDF112T F11

room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in 2.2.

#### 5-3 Low temperature exposure

Subject the filter to -40°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 2.2.

#### 5-4 Temperature cycling

Subject the filter to a low temperature of  $-40^{\circ}\text{C}$  for 30 minutes. Following by a high temperature of  $+85^{\circ}\text{C}$  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 2.2.

#### 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 2.2.

#### 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 2.2.

#### 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 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.