

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:	HDF455A1-S	66						
MARKING 印字:	HDF6497							
PREPARED 编 制:	CHECKED 审 标	亥:						
APPROVED 批 准:	APPROVED 批准: DATE 日期: 2011-12-23							
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 HDF455A1-S6

# 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

**SAW FILTER** 

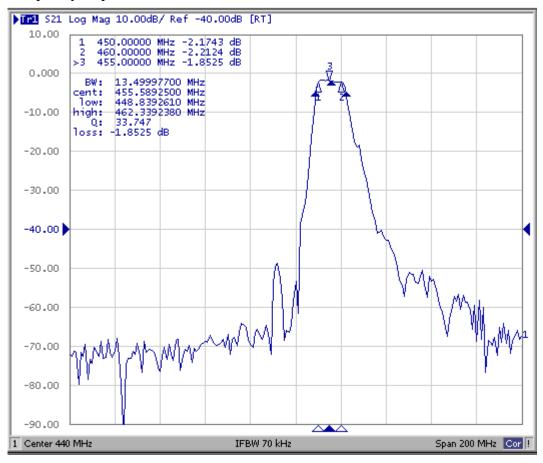
This specification shall cover the characteristics of SAW filter With F455A1 used for the page system.

#### 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	27dBm

**Electronic Characteristics** 

#### 2-1. Typical frequency response



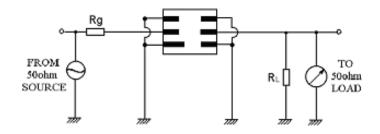


SAW FILTER HDF455A1-S6

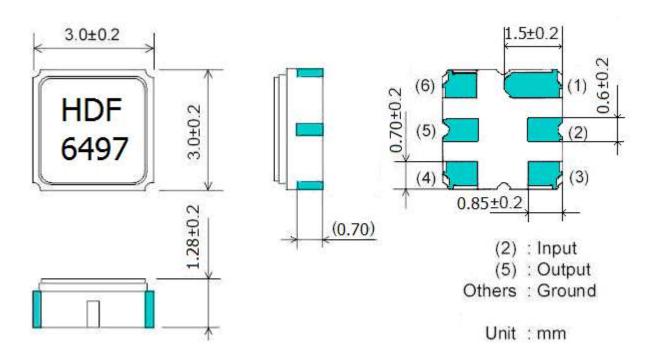
#### 2-2. Electrical characteristics

Part number	F455A1	Unit
Nominal center frequency (Fo)	455	MHz
Insertion Loss		
406.6MHz~416.6 MHz	50min.	dB
fo	3.5max	иь
fo +39.8~ fo +45.8MHz	45min	
Bandwidth (-3dB)	±5~±7	MHz
Ripple (with Fo $\pm 5.0$ MHz)	2.0max	dB
Input/Output Impedance(Nominal)	50//0	Ω/pF

## 3. TEST CIRCUIT



## 4. DIMENSION





**SAW FILTER** 

## 5. ENVIRONMENTAL CHARACTERISTICS

#### 5-1 High temperature exposure

Subject the device to  $+85^{\circ}$ 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  $-40^{\circ}$ 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  $-40^{\circ}$ C for 30 minutes. Following by a high temperature of  $+85^{\circ}$ 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  $260^{\circ}$ C  $\pm 10^{\circ}$ 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  $245^{\circ}$ C  $\pm 5^{\circ}$ 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.

#### 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.

## 7. Packing

#### 7.1 Dimensions

(1) Carrier Tape: Figure 1

(2) Reel: Figure 2



## SAW FILTER HDF455A1-S6

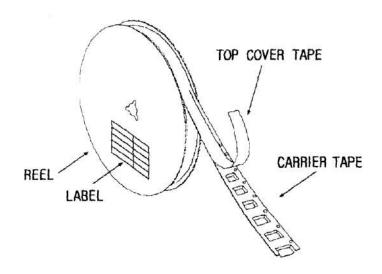
(3) The product shall be packed properly not to be damaged during transportation and storage.

#### 7.2 Reeling Quantity

1000 pcs/reel 7" 3000 pcs/reel 13"

#### 7.3 Taping Structure

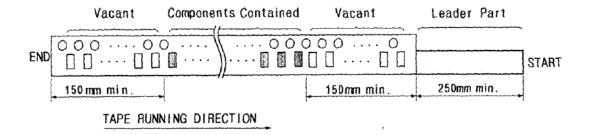
(1) The tape shall be wound around the reel in the direction shown below.



#### (2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.

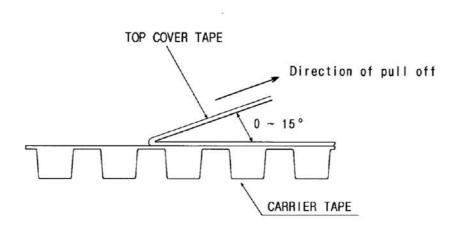


## 8. TAPE SPECIFICATIONS

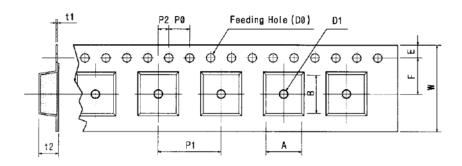


- 8.1 Tensile Strength of Carrier Tape: 4.4N/mm width
- 8.2 Top Cover Tape Adhesion (See the below figure)

(1) pull off angle: 0~15°
(2) speed: 300mm/min.
(3) force: 20~70g



[Figure 1] Carrier Tape Dimensions



Tape Running Direction

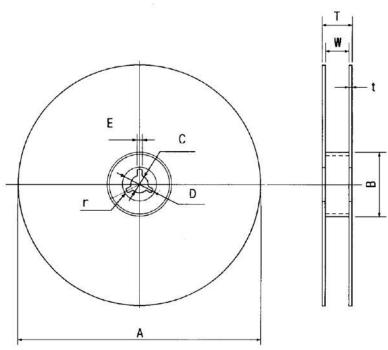
[Unit:mm]

W	F	Е	P0	P1	P2	D0	D1	t1	t2	A	В
12.0	5.5	1.75	4.0	8.0	2.0	Ø1.5	Ø1.0	0.3	2.10	6.40	5.20
$\pm 0.3$	$\pm 0.05$	±0.1	±0.1	$\pm 0.1$	$\pm 0.05$	±0.1	$\pm 0.25$	$\pm 0.05$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$

[Figure 2]

FILTER HDF455A1-S6

[Unit:mm]



A	В	С	D	Е	W	t	r
Ø330	Ø100	Ø13	Ø21	2	13	3	1.0
$\pm 1.0$	$\pm 0.5$	$\pm 0.5$	$\pm 0.8$	$\pm 0.5$	$\pm 0.3$	max.	max.