

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:	HDF311MT039					
PREPARED 编 制:	CHECKED 审 核:					
APPROVED 批准:	DATE 日期	<b>]:</b> 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 HDF311MTO39

# 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

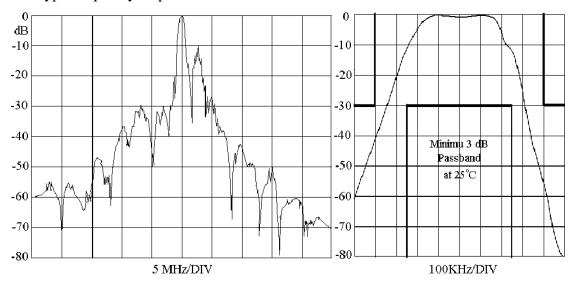
This specification shall cover the characteristics of SAW filter 311.0625MHz with used for remote-control security.

# 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

**Electronic Characteristics** 

#### 2-1. Type frequency response

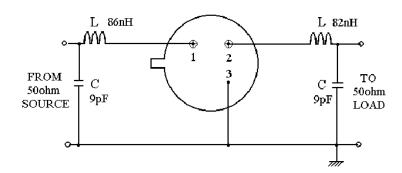


#### 2-2. Electrical characteristics

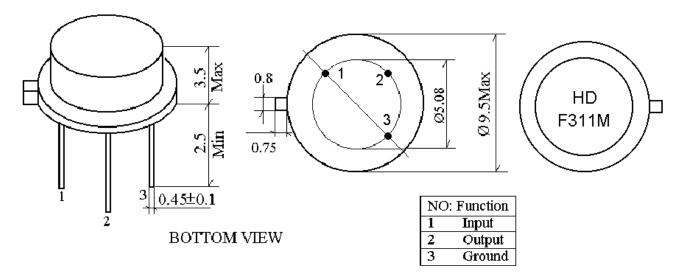
Characteristic		Sym	Min	Typical	Max	Units	
Norminal Frequency		$f_c$		311.0625		MHz	
Insertion Loss		IL		3.5	5.0	dB	
3dB Bandwidth		$BW_3$		600		KHz	
Temperature Stability	Turno	ver Temp.	То	10	25	40	$^{\circ}$
	Turnover Frequency		Fo		$f_c$		KHz
	Freque	y Temp.Coefficient	FTC		0.032		$ppm/\mathbb{C}^2$
Frequency Ag during the Fir	•	olute Value	fA		10		ppm/yr
DC Insulation Resistance between Any Two Pins			1.0			<b>M</b> Ω	
Rejection	at f <sub>c</sub> -21.4MHz (Image)			40	50		
	at f <sub>c</sub> -10.7MHz (Lo)			15	30		dB
	Ultimate				80		
External Impedance Shut Capacitance				9		pF	



#### 3. TEST CIRCUIT



#### 4. DIMENSION



#### 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°C  $\pm 10$ °C for



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 $10\pm1$  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 solded. Please avoid soldering another part of component.