HD 好达 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 : HDF224.7M TO39

PREPARED 编 制 : _____ CHECKED 审 核 : _____

APPROVED 批 准 : _____ D A T E 日 期 : 2006-5-11

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

无锡市好达电子股份有限公司

Shoulder Electronics Limited

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

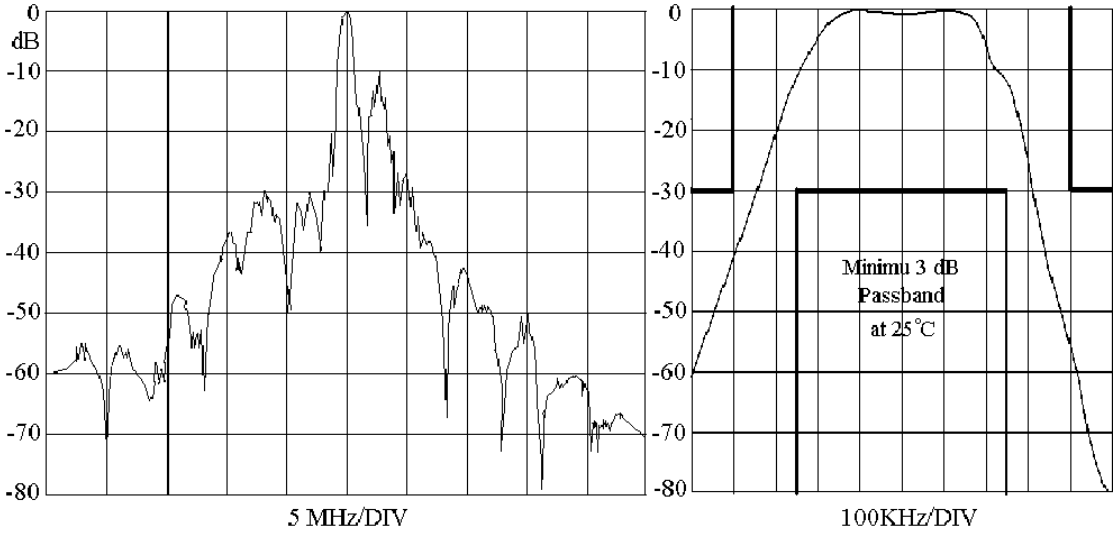
This specification shall cover the characteristics of SAW filter with used for remote-control security.

2. ELECTRICAL SPECIFICATION

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

Electronic Characteristics

2-1.Type frequency response



2-2.Electrical characteristics

Characteristics		Sym	Notes	Min.	Typical	Max.	Units
Center Frequency	Absolute Frequency	Fc	1.2		224.70		M Hz
	tolerance from Nominal	Δfc				±80	KHz
Insertion Loss		IL	1		3.5	5.0	dB
3dB Bandwidth		BW_3	1.2	3 00	400	700	KHz
Rejection	At fo-21.4MHz (Image)		1	40	50		dB
	At fo-10.7 MHz (LO)			16	40		
	Ultimate				80		
Temperature	Operating case temp.	Tc	3.4	-35		+85	℃

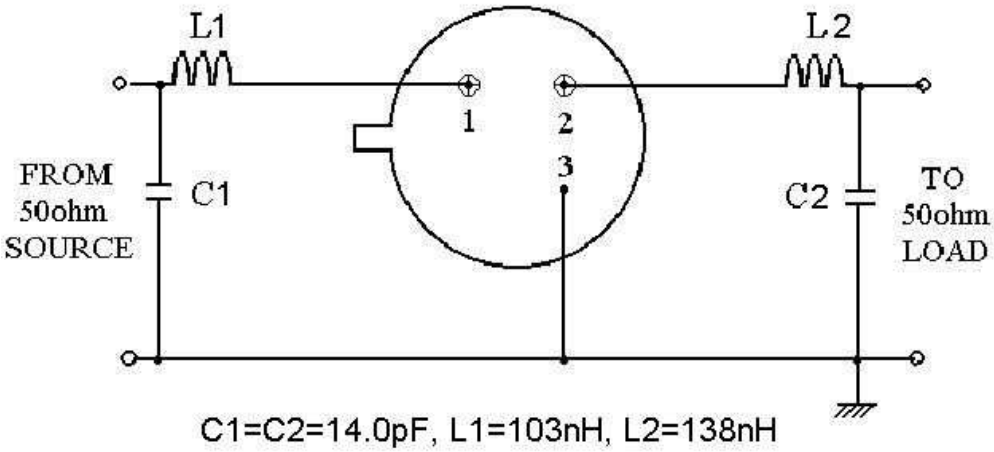
characteristics	Tumor temp.	To	22	37	62	℃
	Tumover Frequency	fo		fc		MHz
	Fre.temp.coeficient	FTC		0.032		ppm/℃
Frequency aging			5	<±10		ppm/y

Note:

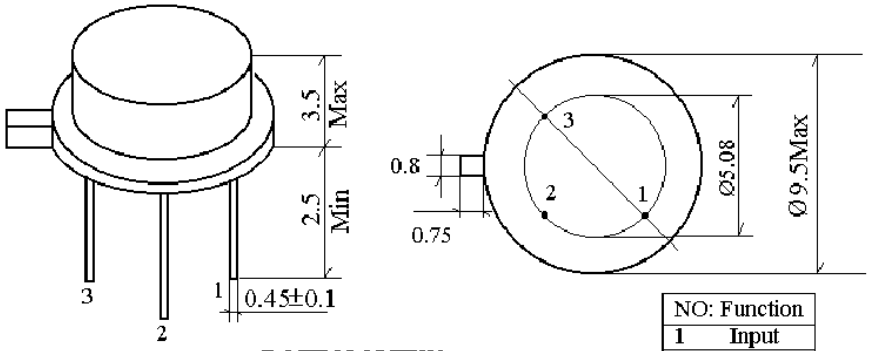
1. Typical test circuit is shown as below.
2. Passband and reject bands are specified in reference to fc.
3. The turnover temperature, To, is the temperature at the maximum frequency, Fo.
4. The nominal frequency at any case temperature, Tc, inside the operating temperature range may be calculated from:$f=fo[1-FTC(To-Tc)^2]$.

5.Typical aging is for 10 years.

3. TEST CIRCUIT



4. DIMENSION



NO:	Function
1	Input
2	Output
3	Ground

5. ENVIRONMENTAL CHARACTERISTICS

5-1 High temperature exposure

Subject the device to +85℃ for 16 hours. Then release the filter into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in table 1.

5-2 Low temperature exposure

Subject the device to -20℃ for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in table 1.

5-3 Temperature cycling

Subject the device to a low temperature of -40℃for 30 minutes. Following by a high temperature of +80℃ for 30 Minutes. Then release the device into the room conditions for 24 hours prior to the measurement. It shall meet the specifications in table 1.

5-4 Resistance to solder heat

Dip the device terminals no closer than 1.5mm into the solder bath at 260℃ ±10℃ for 10±1 sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in table 1.

5-5 Solderability

Subject the device terminals into the solder bath at 245℃ ±5℃ for 5s, More than 95% area of the terminals must be covered with new solder. It shall meet the specifications in table 1.

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 table 1.

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 table 1.

5-8 Lead fatigue

5-8-1 Pulling test

Weight along with the direction of lead without an shock 1kg. The device shall satisfy all the initial Characteristics.

5-8-2 Bending test

Lead shall be subject to withstand against 90℃ bending with 450g weight in the direction of thickness. This operation shall be done toward both direction. The device 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 solded. Please avoid soldering another part of component.