SHOULDER

SHOULDER ELECTRONICS LIMITED

SPECIFICATION FOR APPROVAL

NO 编号：

CUSTOMER 客 户：

PRODUCT 产 品： SAW FILTER

MODEL NO 型 号： HDF920A F11

PREPARED 编 制： Fengyu CHECKED 审 核： York

APPROVED 批 准： Lijiating D A T E 日 期： 2007-06-08

CUSTOMER 客户确认意见：	
CHECKED 审 核：	
APPROVED 批 准：	
D A T E 日 期：	

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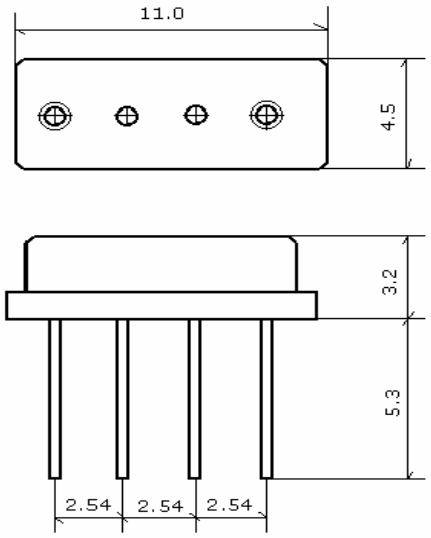
1. Package Dimension

Unit:mm

(F-11)



NO	Function
1	Input
2	Ground
3	Ground
4	Output

2. Marking

HD F920A

1.Color: Black or Blue

2.921: Center Frequency(MHz)

3.Performance

3.1 Application

Low-Loss SAW Filter of cordless system.

Center Frequency:920 MHz

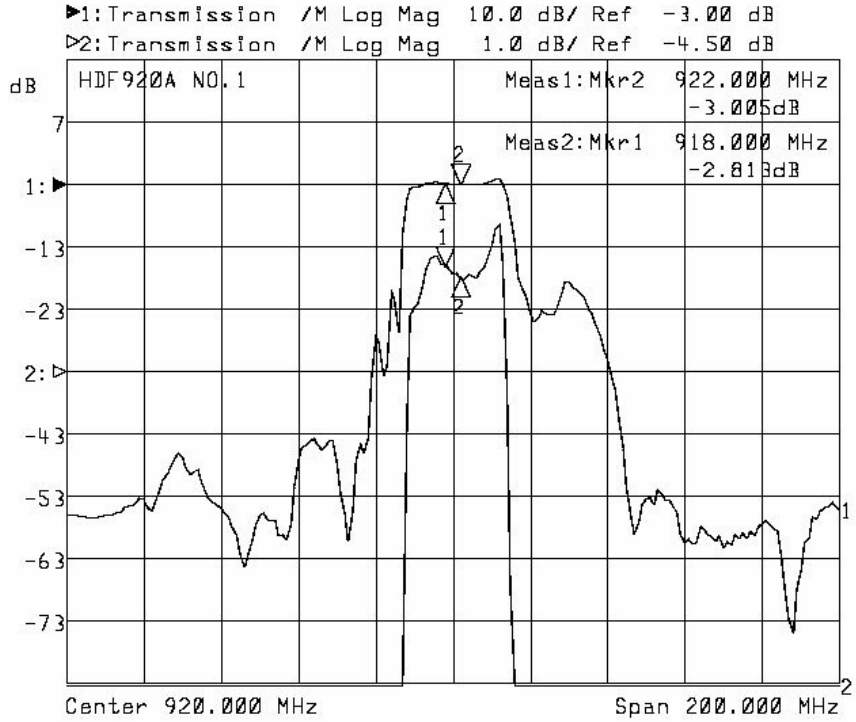
3.2 Maximum Rating

Operation Temperature Range	-10℃ to +50℃
Storage Temperature Range	-40℃to +85℃
DC. Permissive Voltage	0 V DC. max.
Maximum Input Power	5dBm

3.3 Electronic Characteristics

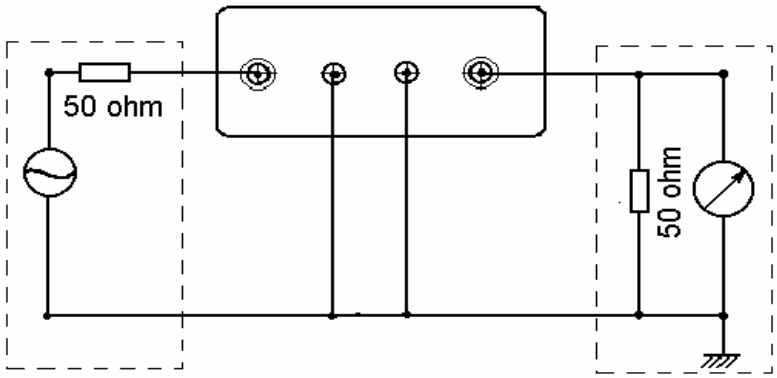
Item	Specification
Center Frequency(fo)	920 MHz
Insertion Loss(dB) 1.)921 MHz 2.)Fo-38.5~-42.5 MHz 3.)Fo-23.5~-19.5 MHz 4.)Fo+22.5~25.5 MHz 5.)Fo+53.5~48.5 MHz 6) Fo-21.0MHz	 4.5max 40 min 25 min 30 min 40 min 20 min
Ripple deviation (920~922MHz)(dB)	1.5max
Pass band width(-3dB)	±2.0MHz min.
Input/output Impedance(Nominal)	50Ω

3.4 Frequency Characteristics



1:Mkr (MHz)	dB	2:Mkr (MHz)	dB
1: 918.0000	-2.784	1› 918.0000	-2.813
2› 922.0000	-3.005	2: 922.0000	-2.978

3.5 Test Circuit



4. ENVIRONMENTAL CHARACTERISTICS

4-1 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.

4-2 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.

4-3 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.

4-4 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.

4-5 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.

4-6 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.

4-7 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.

4-8 Lead fatigue

4-8-1 Pulling test

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

4-8-2 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

5. REMARK

5.1 Static voltage

Static voltage between signal load & ground may cause deterioration &destruction of the component. Please avoid static voltage.

5.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning

5.3 Soldering

Only leads of component may be soldered . Please avoid soldering another part of component.