规格书编号

SPEC NO: HDFB08RSBB5SP05

产品规格书
SPECIFICATION

CUSTOMER 客 户：

PRODUCT 产 品：SAW FILTER

MODEL NO 型 号：HDFB08RSB-B5

MARKING 印 字：B098

PREPARED 编 制： CHECKED 审 核：

APPROVED 批 准： D A T E 日 期：2016-11-25

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

Factory Address: NO. 115, Gaoyun Road, Binhu Economic & Technology Development Area, Wuxi, Jiangsu, China. Tel：86-510-85629111
Country of origin: China

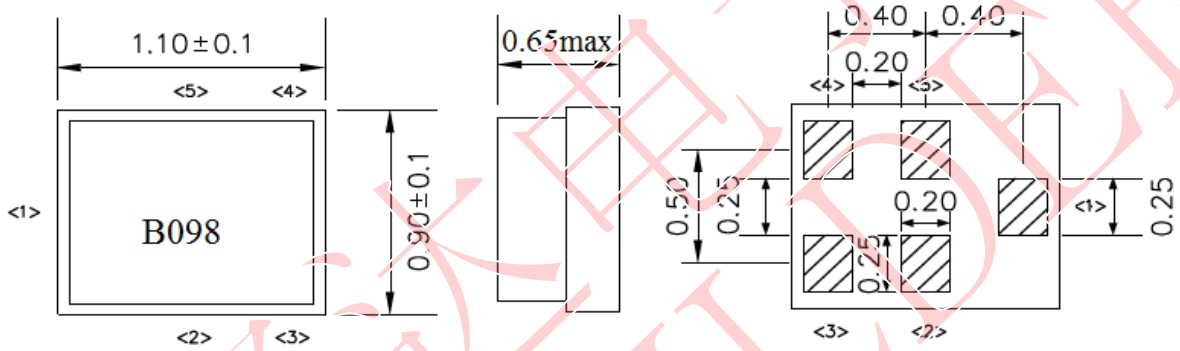
更改历史记录
History Record

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
2015-09-16	SP02	HDFB08RSB-B5		增加 100Ω 匹配电路。	
2016-5-30	SP03	HDFB08RSB-B5		Complete specifications. Add product application, reliability and other information.	
2016-08-23	SP04	HDFB08RSB-B5		Change carrier tape size. Carrier tape encryption.	10. TAPE SPECIFICATIONS [Figure 1] Carrier Tape Dimensions
2016-11-25	SP05	HDFB08RSB-B5		Correction device size. Thickness changed from 0.5max. to 0.65max	2. Package Dimension

1. Application

- Low-loss RF filter for mobile telephone WCDMA Band Ⅷ systems and GSM 900 systems, receive path (RX).
- Suitable for diversity applications.
- Unbalanced to balanced operation.
- Useable passband 35MHz.
- RoHS compatible.

2. DIMENSION (PKG SIZE 1.1 x 0.9mm)

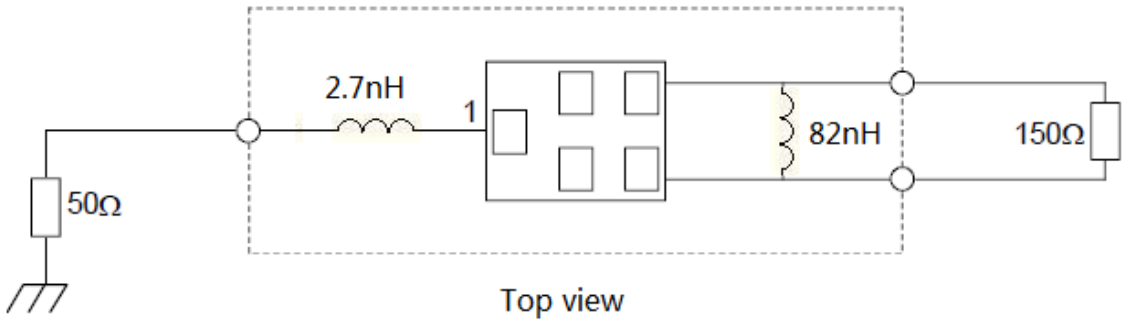


Unit: mm
Pin configuration
1 Input
3,4 Balanced Output
2,5 Ground

3. Maximum Rating

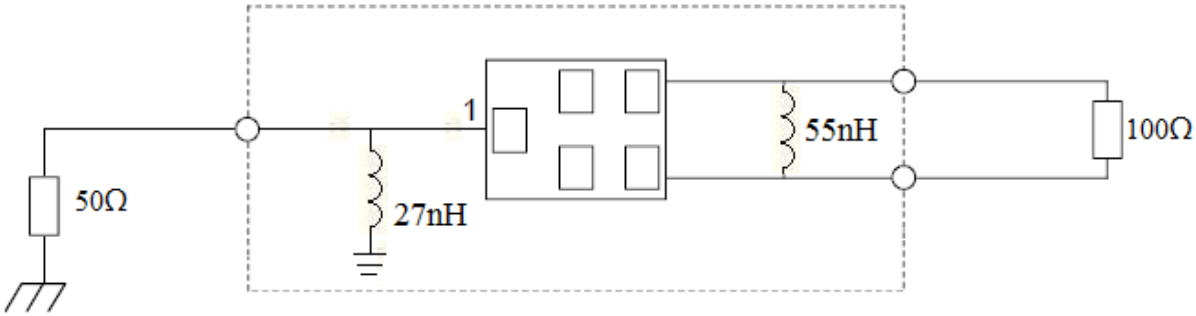
Items	Conditions
Operation temperature rang	-30℃ ~ +85℃
Storage temperature rang	-40℃ ~ +85℃
ESD voltage Sensitive discharge device	ESD(MM) : 50VDC ESD(HBM) : 175VDC
DC Voltage VDC	5V
Max Input Power	15dBm 2000h
Moisture Sensitivity Level	MSL 2

4.TEST CIRCUIT



Top view

OR



Top view

5. ELECTRICAL SPECIFICATION

Table1. Electrical Specification

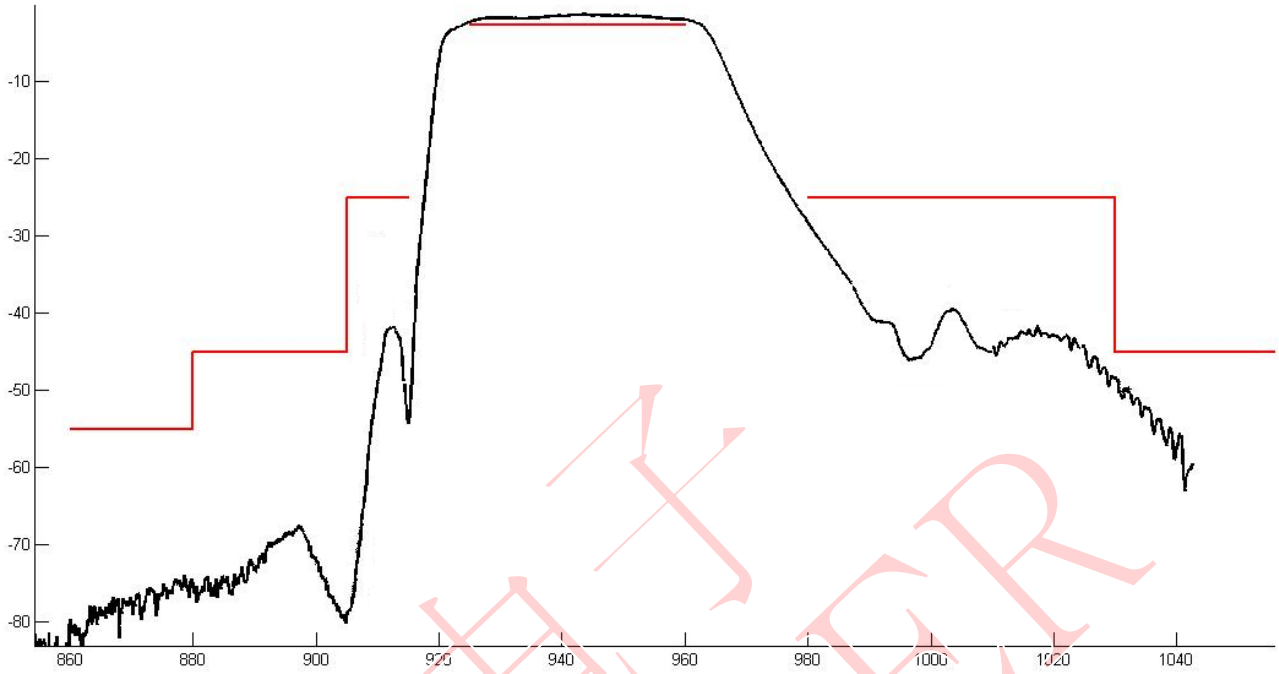
Terminating source impedance: Zs = 50Ω unbalanced

Terminating load impedance: Zl = 150Ω balanced or 100Ω balanced

(Please choose according to actual use)

Item		Condition (MHz)	Specification			Unit
			Min	Typ	Max	
Insertion loss		925~960	-	2.1	2.7	dB
Pass band ripple		925~960	-	0.7	1.4	dB
VSWR	ANT	925~960	-	1.7	2.0	-
	Rx		-	1.7	2.0	-
Amplitude Balance		925~960		±0.2	±0.8	dB
Phase Balance		925~960		180±1.4	180±8	°
Absolute attenuation		0.1~860	55	70	-	dB
		860~880	55	70	-	dB
		880~905	45	60	-	dB
		905~915	25	30	-	dB
		980~1030	25	28	-	dB
		1030~1040	45	50	-	dB
		1040~2500	45	60	-	dB
		2500~6000	35	46	-	dB

6. Typical frequency response



7. ENVIRONMENTAL CHARACTERISTICS

7.1 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 5.

7.2 Low temperature exposure

Subject the device to -40℃ for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 5.

7.3 Temperature cycling

Subject the device to a low temperature of -40℃ for 30 minutes. Following by a high temperature of +85℃ for 30 Minutes. Then release the device into the room conditions for 24 hours prior to the measurement. It shall meet the specifications in 5.

7.4 Resistance to solder heat

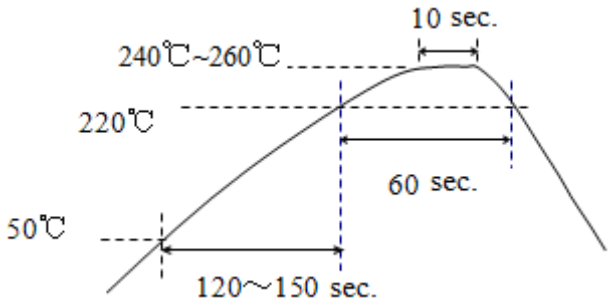
1、immerge the solder bath at 260℃ for 10 sec.

2、the iron at 370℃ for 3 sec

7.5 Solderability

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

7.6 Reflow soldering



The specimen shall be passed through the reflow furnace with the condition shown in the above profile for 1 time.

The specimen shall be stored at standard atmospheric conditions for 1h, after which the measurement shall be made. Test board shall be 1.6 mm thick. Base material shall be glass fabric base epoxy resin.

7.7 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1m 3 times. the device shall fulfill the specifications in 5.

7.8 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 5.

8. REMARK

8.1 Static voltage

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

8.2 Ultrasonic cleaning

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

8.3 Soldering

Only pad component may be solded. Please avoid soldering another part of component.

9. Packing

9.1 Dimensions

(1) Carrier Tape: Figure 1

(2) Reel: Figure 2

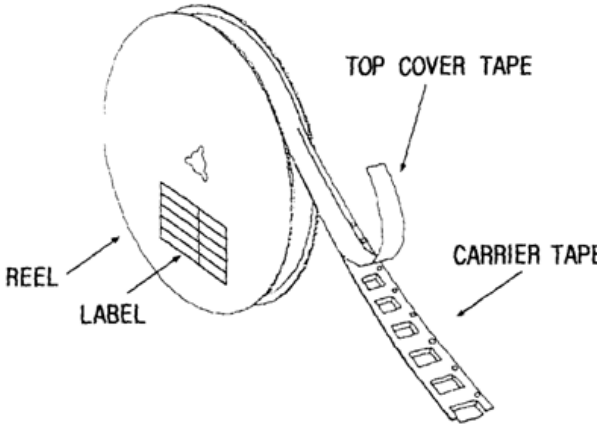
(3) The product shall be packed properly not to be damaged during transportation and storage.

9.2 Reeling Quantity

10000 pcs/reel φ 178mm

9.3 Taping Structure

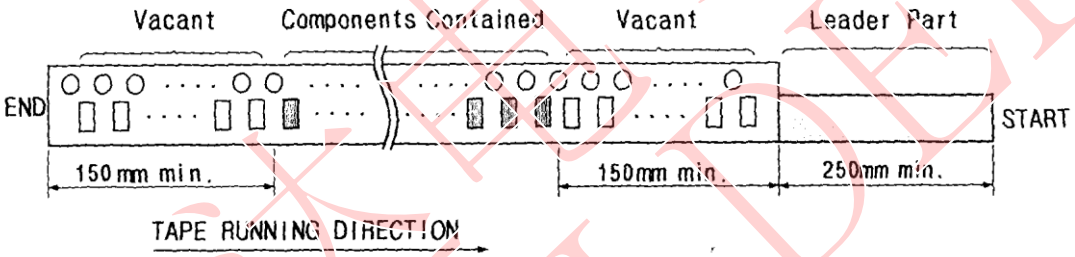
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

Device Name	
Marking	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.



10. TAPE SPECIFICATIONS

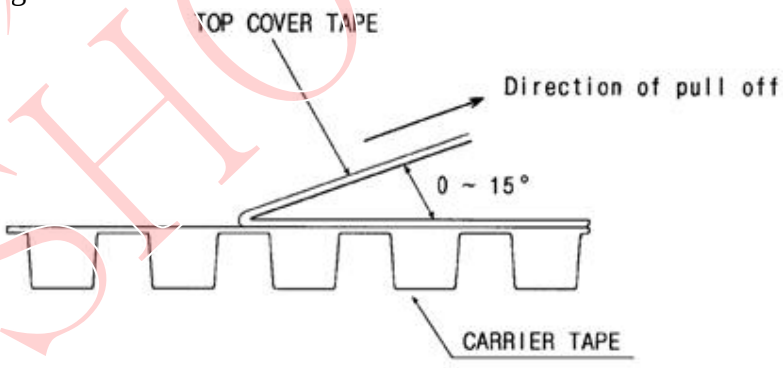
10.1 Tensile Strength of Carrier Tape: 4.4N/mm width

10.2 Top Cover Tape Adhesion (See the below figure)

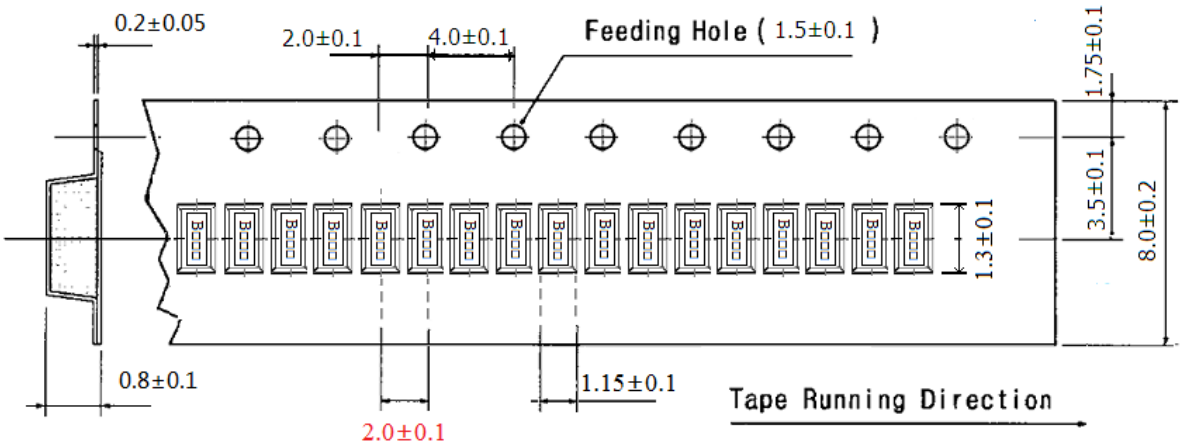
(1) pull off angle: 0~15°

(2) speed: 300mm/min.

(3) force: 20~70g

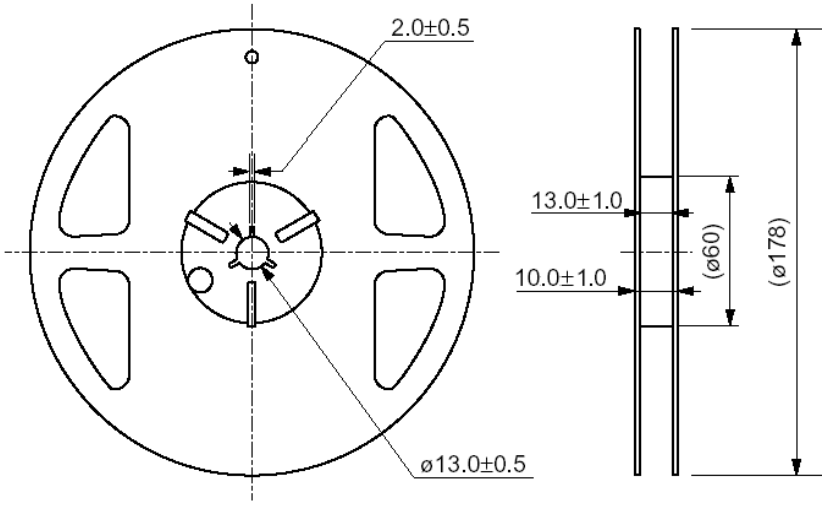


[Figure 1] Carrier Tape Dimensions



Prior to the size of 4.0±0.1, after encryption,
modified to 2.0±0.1.

[Figure 2] 10000 pcs/reel φ 178mm



ø178 Reel Dimension (in mm)