HD SHOULDER 好达

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：HDF1575A SMD-6

MARKING 印 字：HDF6G09

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

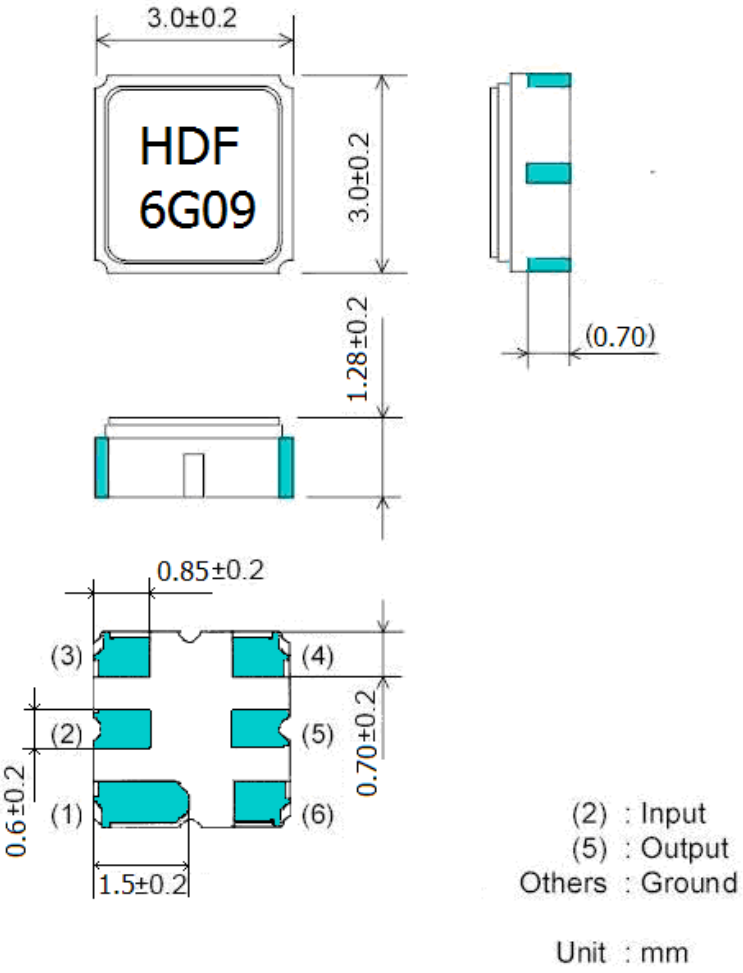
更改历史记录
History Record

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.Features

GPS applications
Usable bandwidth of 2 MHz
No impedance matching require for operation at 50 .
Single-ended Operation

2.Package Dimension



Marking：HDF6G09

HD: Brand
F : Filter
6 : SMD-6
G09: No.

3. Marking

2.1 Color: Black or Blue

2.2 1575: Center Frequency(MHz)

4.Performance

4.1Application

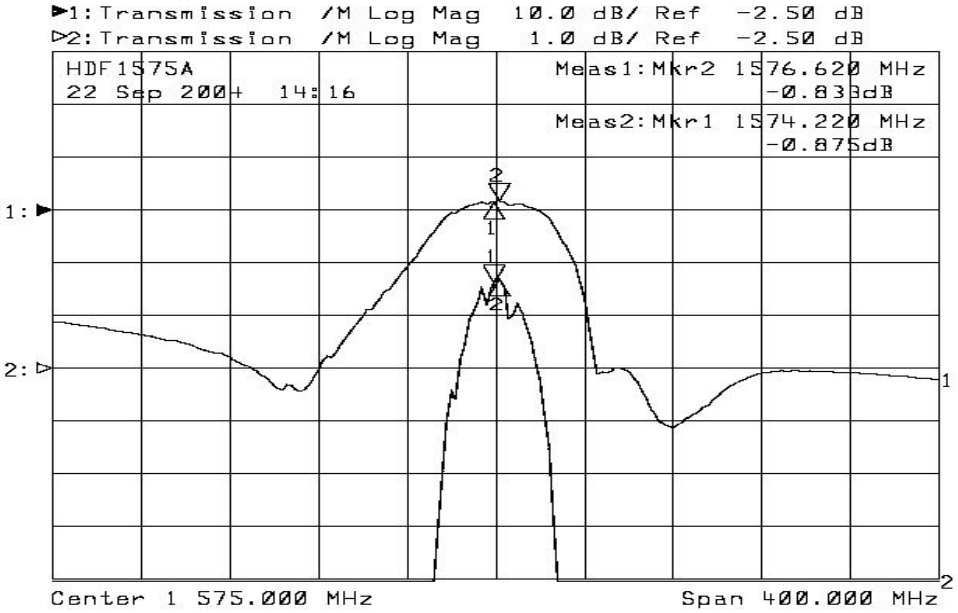
Low-Loss SAW Filter of cordless system.

Center Frequency:1575.42 MHz

4.2Maximum Rating

Operation Temperature Range	-40℃ to +85℃
Storage Temperature Range	-40℃to +85℃
Power Handling Capability	10dBm

4.3Electronic Characteristics

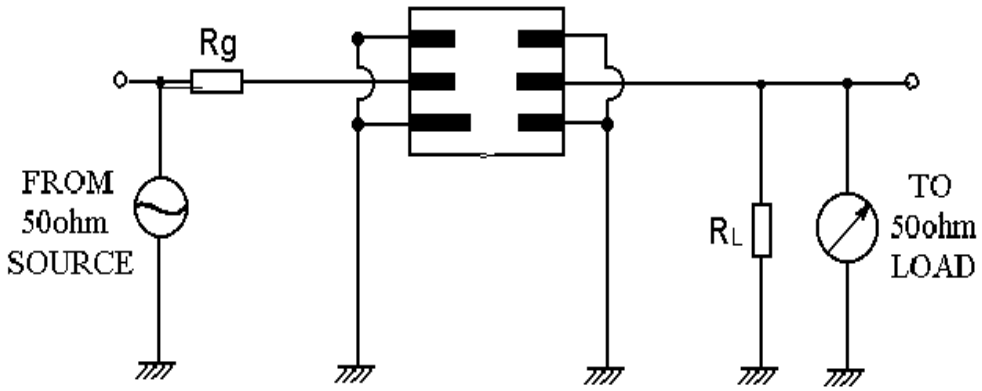


Parameter	Symbol	Conditions	Min	Typ.	Max.	Unit
Center frequency				1575.42		MHZ
Operational bandwidth	f op		1574.22		1576.62	MHz
Insertion Loss	IL	In f op		1.5	2.5	dB
Amplitude Variation	AV	In f op		0.2	0.5	dB
VSWER	SWR	In f op		1.3	2	
Rejectiona wrt 0 dB	Rj1	0.3 ~ 700 MHz	40	45		dB
In Top	Rj2	700~1460MHz	37	40.5		dB
	Rj3	1460~1470MHz	45	50		dB
	Rj4	1470~1525MHz	37	43		dB
	Rj5	1525~1535.42MHz	20	25		dB
	Rj6	1615.42~1620MHz	25	35		dB
	Rj7	1620~1650 MHz	45	50		dB
	Rj8	1650~3000 MHz	40	45		dB
I/P & O/P impedance	Zin/Zout	Unmatched		50		Ohm

Notes :

1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
3) All attenuation measurements are measured relative to insertion loss

4.4 Test Circuit



5. ENVIRONMENTAL CHARACTERISTICS

5-1 Temperature cycling

Subject the device to a low temperature of -40℃ for 30 minutes. Following by a high temperature of +85℃ for 5 Minutes and a higher temperature of +85℃ for 30 Minutes. Then release the device into the room conditions for 1 to 2 hours prior to the measurement. It shall meet the specifications in 4.3.

5-2 Resistance to solder heat

Submerge the device terminals into the solder bath at 260℃ ±5℃ for 10±1 sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in 4.3.

5-3 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 4.3.

5-4 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1 m 3 times. the filter shall fulfill the specifications in 4.3.

5-5 Vibration

Subject the device to the vibration for 2 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 hz. The filter shall fulfill the specifications in 4.3.

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

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

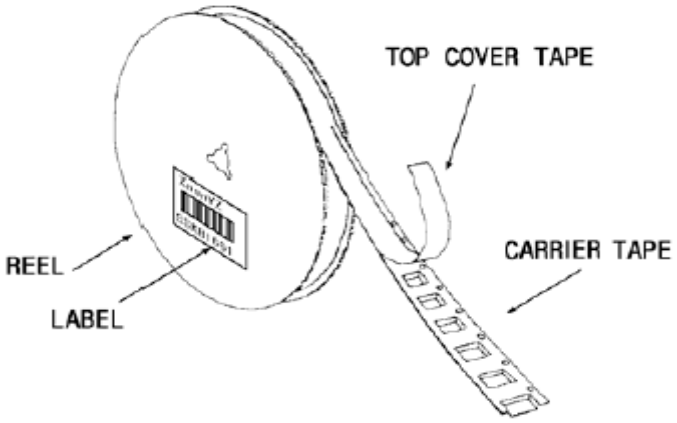
7.2 Reeling Quantity

1000 pcs/reel 7”

3000 pcs/reel 13”

7.3 Taping Structure

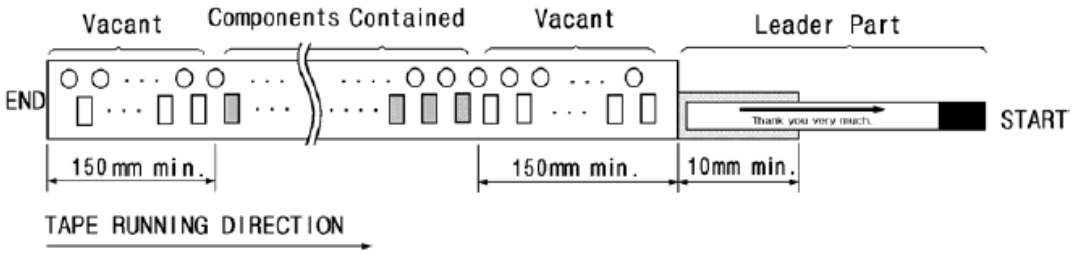
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.

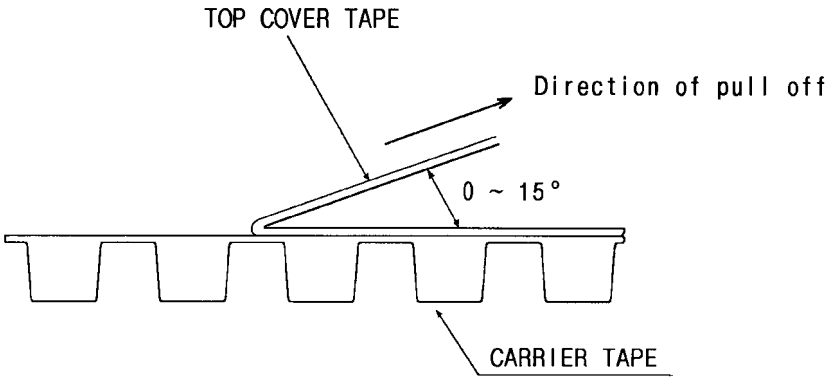


8. TAPE SPECIFICATIONS

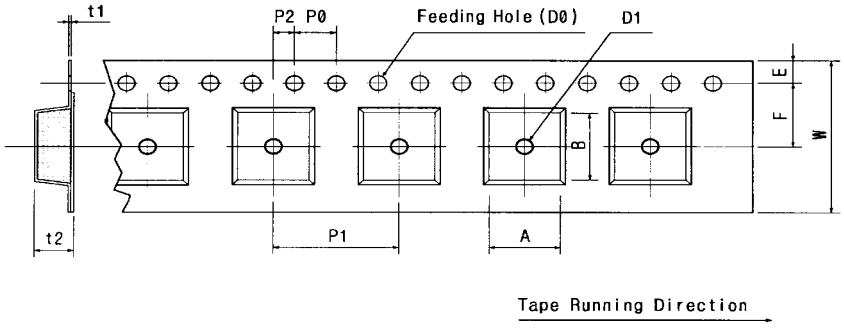
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

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

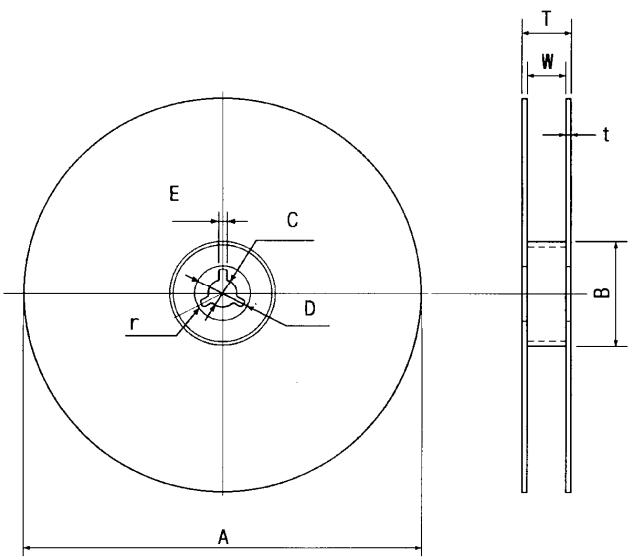


[Unit:mm]

W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.00 ±0.30	5.50 ±0.10	1.75 ±0.10	4.00 ±0.10	4.00 ±0.10	2.00 ±0.10	Ø1.50	Ø1.5 ±0.25	0.31 ±0.05	1.30 ±0.10	3.4 MAX.	3.4 MAX

[Figure 2]

[Unit:mm]



A	B	C	D	E	W	t	r
Ø330 ±1.0	Ø100 ±0.5	Ø13 ±0.5	Ø21 ±0.8	2 ±0.5	13 ±0.3	3 max.	1.0 max.