

规格书编号

SPEC NO: HDF1447A1S6SP01

产品规格书

SPECIFICATION

CUSTOMER 客户: _____

PRODUCT 产品: _____ SAW FILTER _____

MODEL NO 型号: _____ HDF1447A1-S6 _____

MARKING 印字: _____ HDF6G321 _____

PREPARED 编制: _____ CHECKED 审核: _____

APPROVED 批准: _____ D A T E 日期: _____ 2012-5-11 _____

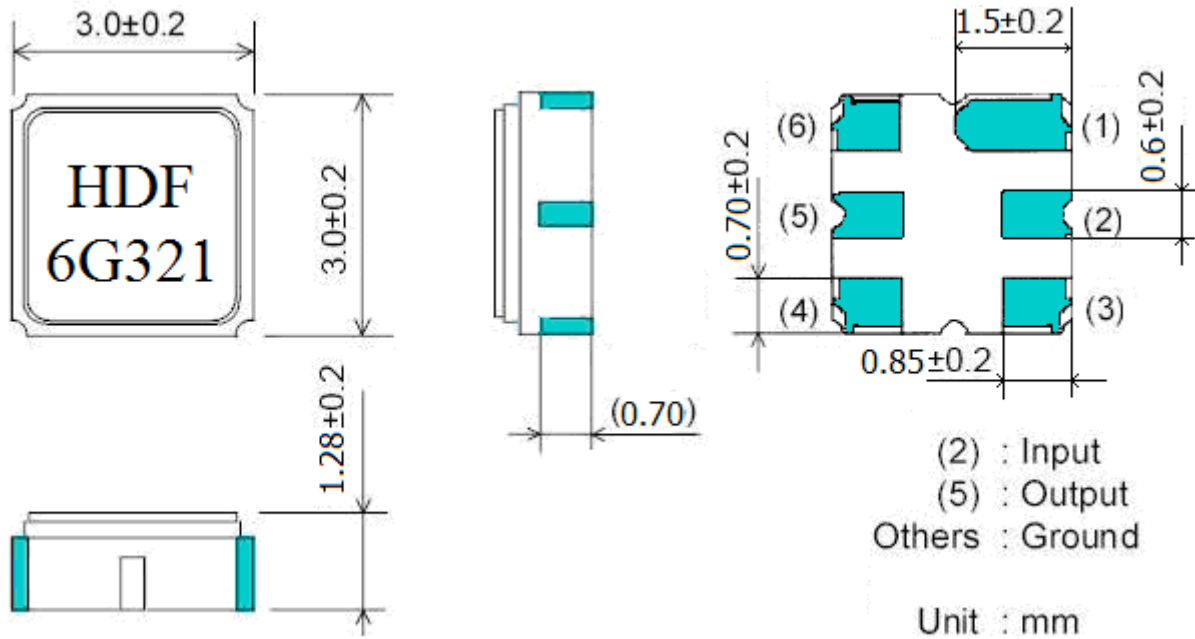
客户确认 CUSTOMER RECEIVED:		
审核 CHECKED	批准 APPROVED	日期 DATE

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																																								
2012-5-11	HDF1447A1S 6SP01	HDF1447A1-S 6		Attenuation: Before: <table border="1"> <thead> <tr> <th>Test Condition</th> <th>Min</th> <th>Typ</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>D.C~1367MHz</td> <td>25</td> <td>30</td> <td>dB</td> </tr> <tr> <td>1526~2500MHz</td> <td>30</td> <td>35</td> <td>dB</td> </tr> <tr> <td>2500~3000MHz</td> <td>25</td> <td>40</td> <td>dB</td> </tr> <tr> <td>3000~5000MHz</td> <td>15</td> <td>-</td> <td>dB</td> </tr> </tbody> </table> After: <table border="1"> <thead> <tr> <th>Test Condition</th> <th>Min</th> <th>Typ</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>D.C~1000MHz</td> <td>20</td> <td>23</td> <td>dB</td> </tr> <tr> <td>1000~1367MHz</td> <td>25</td> <td>30</td> <td>dB</td> </tr> <tr> <td>1526~2000MHz</td> <td>25</td> <td>28</td> <td>dB</td> </tr> <tr> <td>2000~4000MHz</td> <td>15</td> <td>18</td> <td>dB</td> </tr> </tbody> </table>	Test Condition	Min	Typ	Unit	D.C~1367MHz	25	30	dB	1526~2500MHz	30	35	dB	2500~3000MHz	25	40	dB	3000~5000MHz	15	-	dB	Test Condition	Min	Typ	Unit	D.C~1000MHz	20	23	dB	1000~1367MHz	25	30	dB	1526~2000MHz	25	28	dB	2000~4000MHz	15	18	dB	3.2 Electronic Characteristics
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1. Package Dimension



2. Marking: HDF6G321

HD: Brand

F: Filter

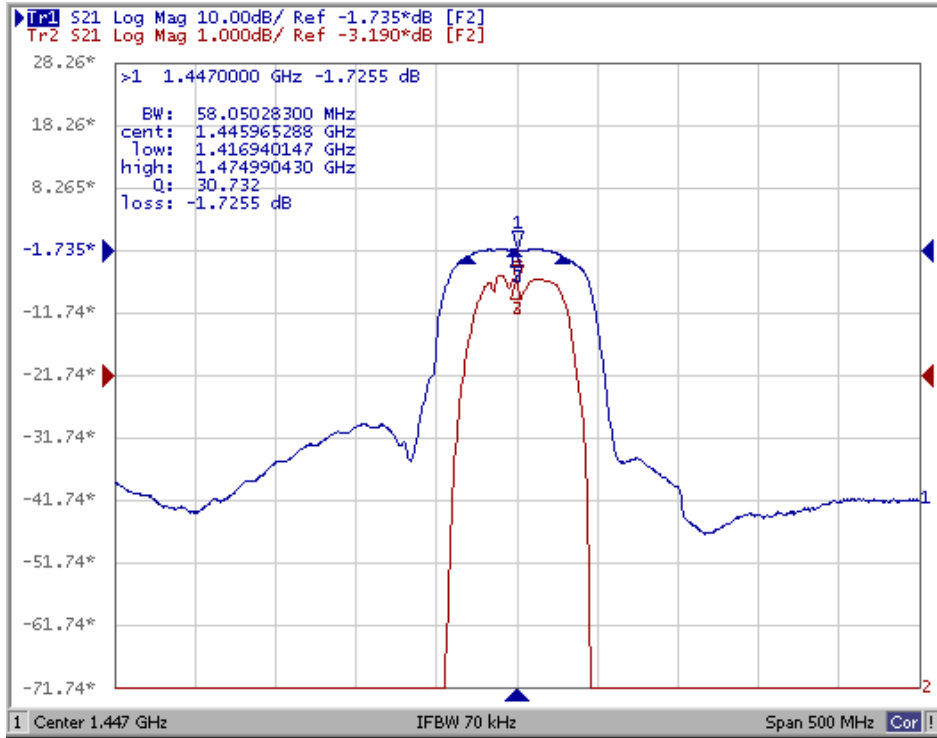
6: SMD-6

G321: No.

3. Performance

Items	Rating	unit
Maximum Working Voltage	0	V _{dc}
Maximum Working Power	10	dBm
Operating Temperature Range	-40 ~ +85	°C
Storage Temperature Range	-40 ~ +85	°C

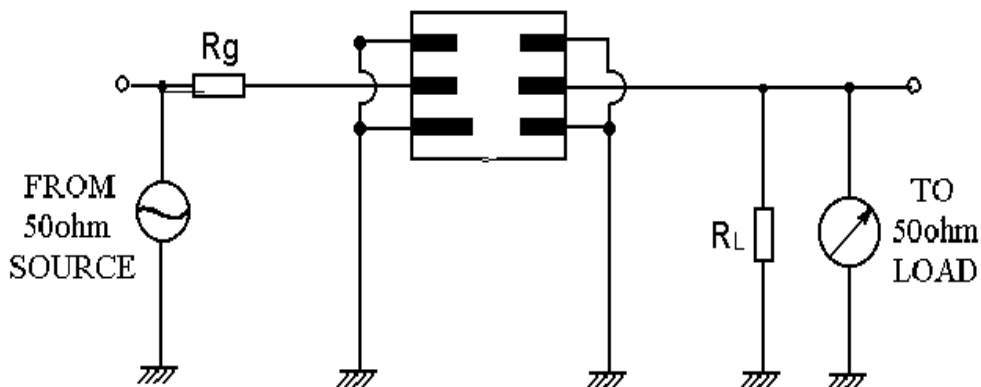
3.1 Typical frequency response



3.2 Electronic Characteristics

Items	Test Condition	Min	Typ	Max	Unit
Center Frequency	-	-	1447	-	MHz
Insertion Loss	$F_0 \pm 20$ MHz	-	2.5	4.0	dB
Ripple Level	$F_0 \pm 20$ MHz	-	0.5	1.5	dB
Attenuation	D.C~1000MHz	20	23	-	dB
	1000~1367MHz	25	30	-	dB
	1526~2000MHz	25	28	-	dB
	2000~4000MHz	15	18	-	dB
VSWR	$F_0 \pm 20$ MHz	-	-	2.0	-
Input/Output Impedance	-	-	50	-	ohm

4. Test Circuit



5. ENVIRONMENTAL CHARACTERISTICS

5-1 Temperature cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of $+85^{\circ}\text{C}$ for 5 Minutes and a higher temperature of $+85^{\circ}\text{C}$ 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 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 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 $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 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.

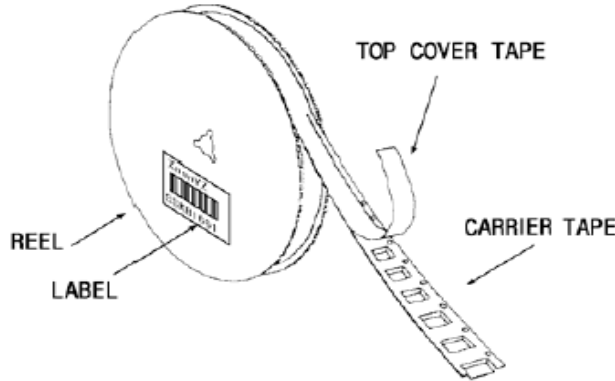
7.2 Reeling Quantity

1000 pcs/reel 7''

3000 pcs/reel 13''

7.3 Taping Structure

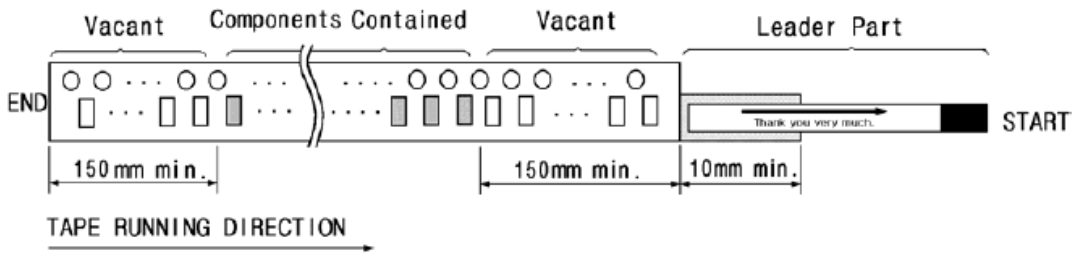
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.

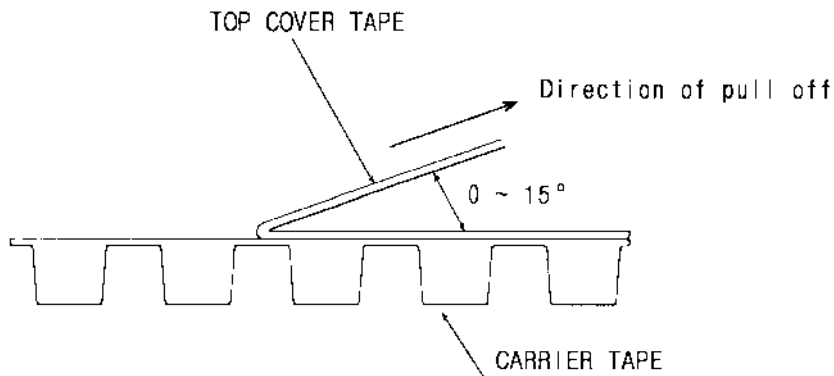


8. TAPE SPECIFICATIONS

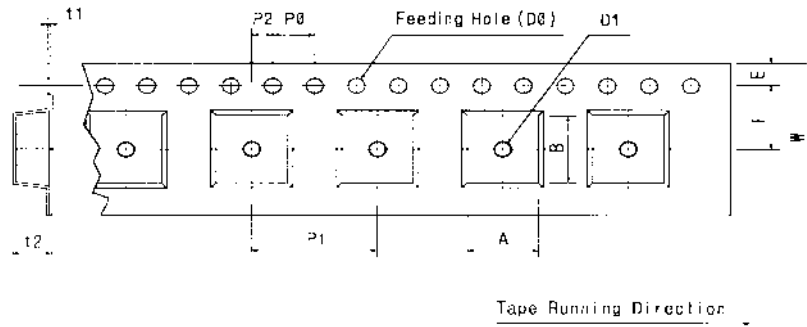
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

8.2 Top Cover Tape Adhesion (See the below figure)

- (1) pull off angle: 0~15°
- (2) speed: 300mm/min.
- (3) force: 20~70g



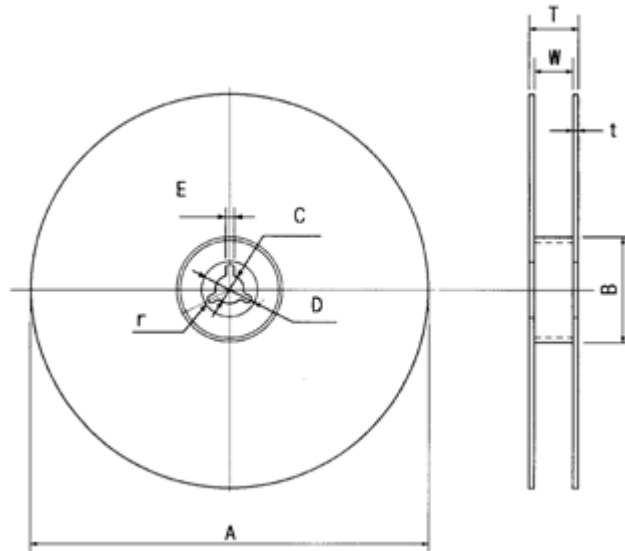
[Figure 1] Carrier Tape Dimensions



[Unit:mm]

W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.00	5.50	1.75	4.00	4.00	2.00	$\varnothing 1.50$	$\varnothing 1.5$	0.31	1.30	3.4	3.4
± 0.30	± 0.10	± 0.10	± 0.10	± 0.10	± 0.10		± 0.25	± 0.05	± 0.10	MAX.	MAX.

[Figure 2]



[Unit:mm]

A	B	C	D	E	W	t	r
$\varnothing 330$	$\varnothing 100$	$\varnothing 13$	$\varnothing 21$	2	13	3	1.0
± 1.0	± 0.5	± 0.5	± 0.8	± 0.5	± 0.3	max.	max.