Shoulder 好达

SHOULDER ELECTRONICS LIMITED

SAW Components Data Sheet

PRODUCT 产 品: SAW FILTER

MODEL NO 型 号: HDF1220A1 SMD-7

PREPARED 编 制:

CHECKED 审 核:

APPROVED 批 准:

DATE 日 期: 2007-01-25

1. SCOPE

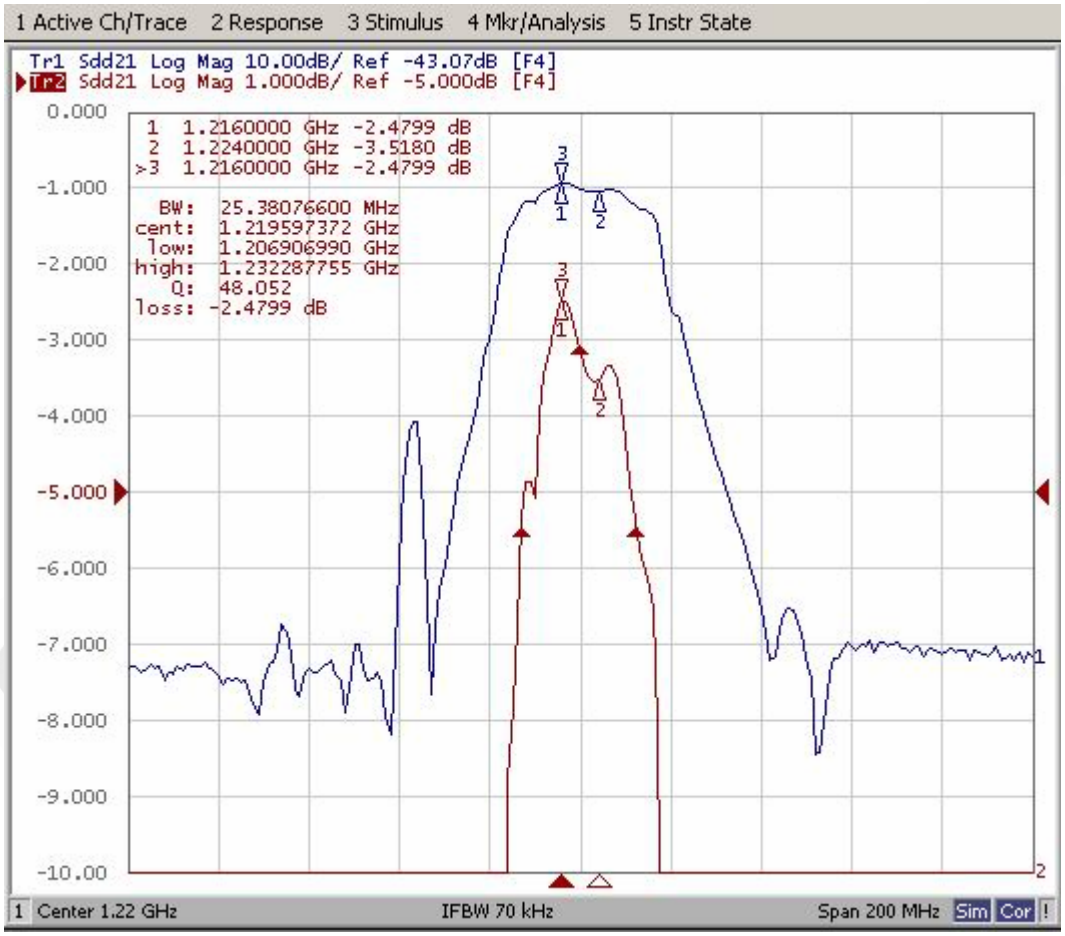
This specification shall cover the characteristics of SAW filter With F1220A1S7 used digital television

2. ELECTRICAL SPECIFICATION

Dc voltage VDC>	0V
Operation temperature	-40°C~+85°C
Storage temperature	-40°C~+85°C
RF Power dissipation	0 dBm(source impedance 200Ω)

Electronic Characteristics

2-1.Typical frequency response



2-2.Electrical characteristics

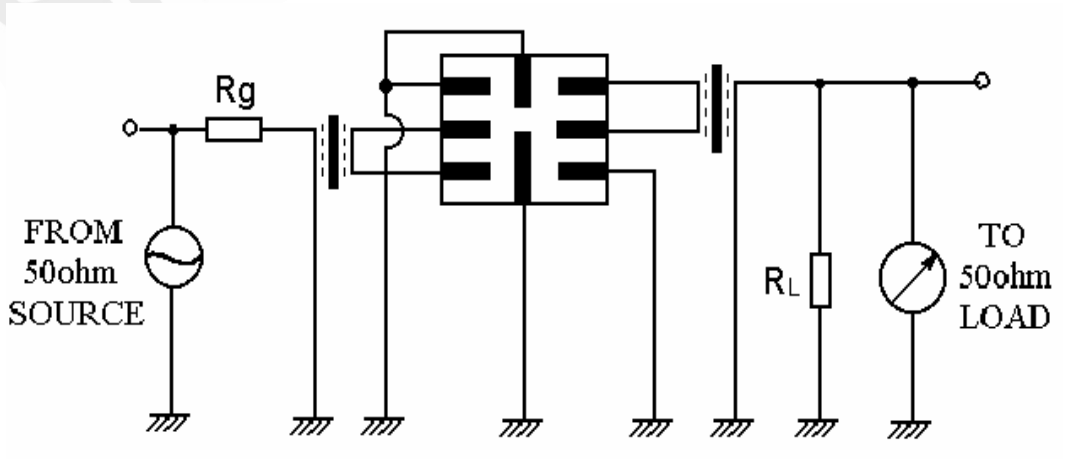
Operating temperature range: T = –40 °C ... +85 °C

Terminating source impedance: Z_S = 200 Ω

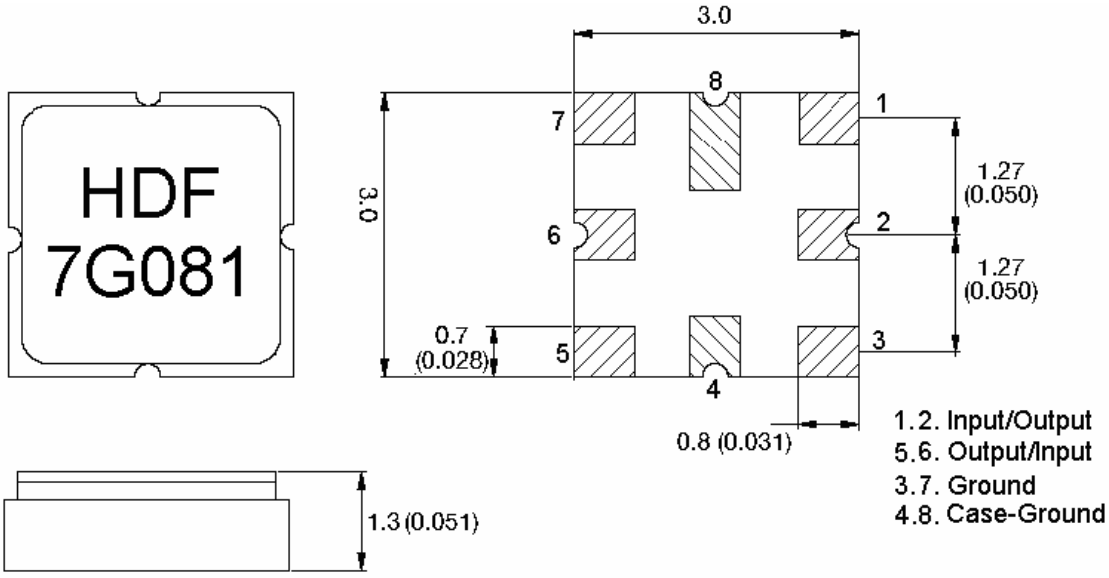
Terminating load impedance: Z_L = 200 Ω

Part number	min	typ	max	unit
Nominal frequency	-	1220.0	-	MHz
Maximum insertion attenuation 1216~1224MHz	-	3.6	4.2	dB
Amplitude ripple in passband 1216~1224MHz	-	0.6	1.2	dB
Attenuation				
500~f_0-91.0MHz	58	62	-	dB
f_0-91.0~ f_0-85.0MHz	58	62	-	
f_0-76.0~ f_0-68.0MHz	56	60	-	
f_0-88.0MHz	58	62	-	
f_0-72.0MHz	56	60	-	
f_0-44.0MHz	46	54		
f_0-36.0MHz	42	44		
f_0+70.0MHz~2000MHz	56	62		
Group delay riple 1216~1224MHz	-	15	-	ns

3. TEST CIRCUIT



4. DIMENSION



5. ENVIRONMENTAL CHARACTERISTICS

5-1 Temperature cycling

Subject the device to a low temperature of -45℃for 30 minutes. Following by a high temperature of +25℃ 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 table 1.

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 table 1.

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 table 1.

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 table 1.

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 table 1.

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.

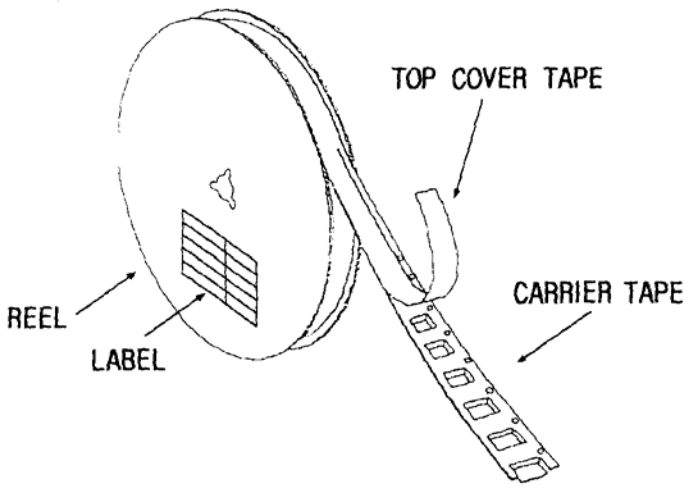
7.2 Reeling Quantity

1000 pcs/reel 7”

3000 pcs/reel 13”

7.3 Taping Structure

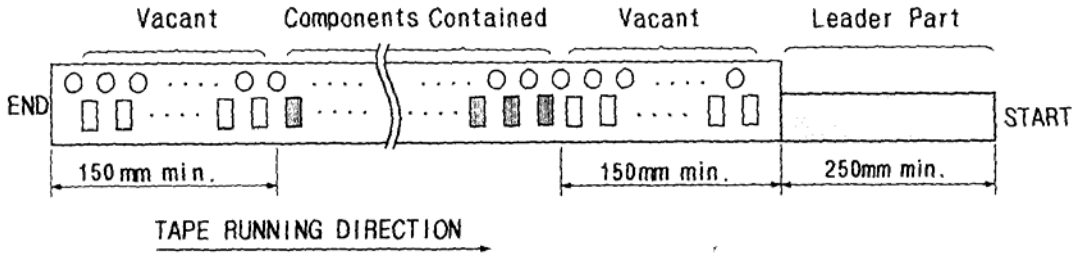
(1) The tape shall be wound around the reel in the direction shown below.



(2) Label

Device Name	
User Product Name	
Quantity	
Lot No.	

(3) Leader part and vacant position specifications.



8. TAPE SPECIFICATIONS

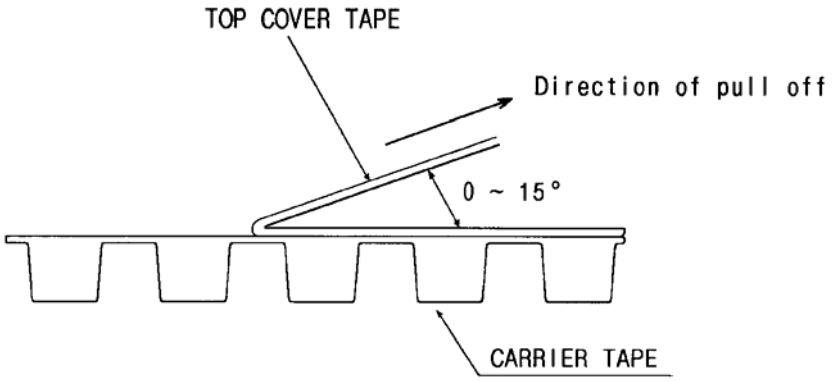
8.1 Tensile Strength of Carrier Tape: 4.4N/mm width

8.2 Top Cover Tape Adhesion (See the below figure)

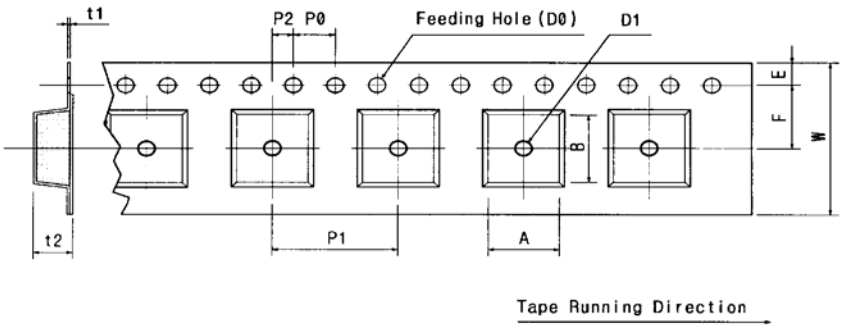
(1) pull off angle: 0~15°

(2) speed: 300mm/min.

(3) force: 20~70g



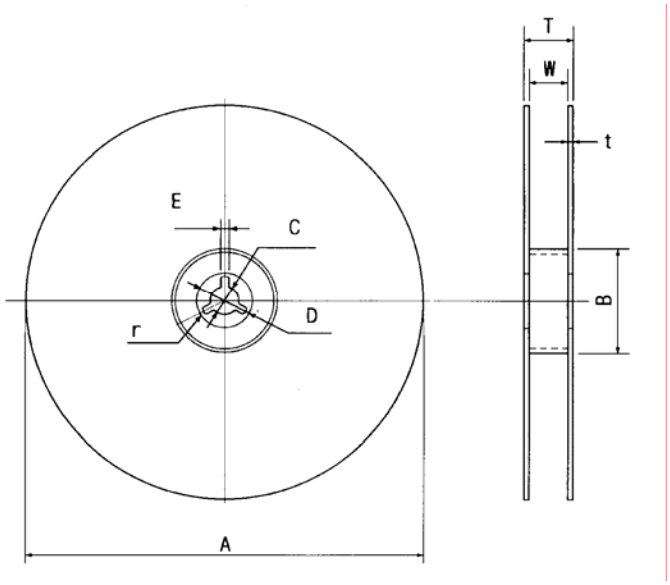
[Figure 1] Carrier Tape Dimensions



[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.