

SPECIFICATION

COMMERCIALLY AVAILABLE

ITEM: SAW BAND PASS
PART NUMBER: SF01690002
RoHS

Revised: 3/19/13 Marking

Revised: 6/12/13 Added Roofing Filter

ISSUED	CHECKED	CHECKED	CHECKED
2/4/13 DS	02/08/2013 TFG	02/08/2013 TFG	02/08/2013 GL
3/14/13 ^(kn)			
3/19/13 DS	03/29/2013 TFG	03/29/2013 TFG	03/29/2013 GL
	06/12/2013 TFG	06/12/2013 TFG	06/12/2013 GL

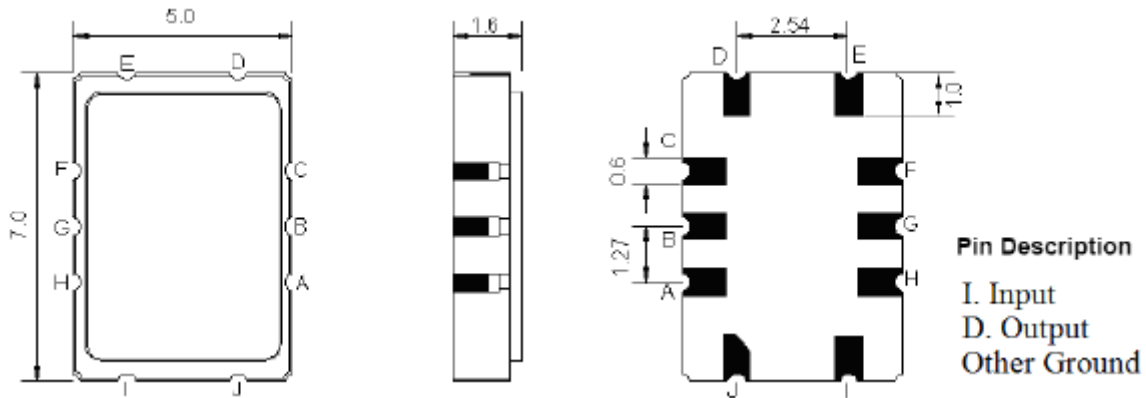
FILTRONETICS Inc

1. Electrical Specifications:

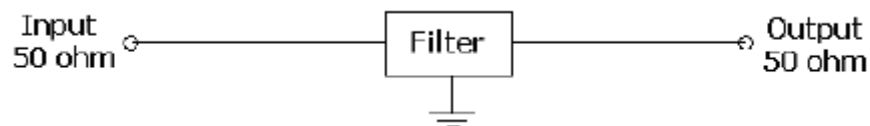
	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	169.4	-
Insertion Loss (169.3-169.5MHz)	dB		3.0	4.5
Amplitude Ripple (169.3-169.5MHz)	dB		0.5	1.5
Relative Attenuation DC~165MHz	dB	30	45	-
170.6 MHz ~ 1000 MHz		20	30	
Input/Output Impedance	Ohms		50	
Operating Temperature Range	-20°C to +60°C			
Storage Temperature Range	-45°C to +85°C			
Maximum DC Voltage	10 V			
Maximum Input Power	10 dBm			
Package Size	7x5x1.6mm			
RoHS Compliant	Yes			

Marking:
SF169.4
Filtro
D/C

2. Mechanical Package:

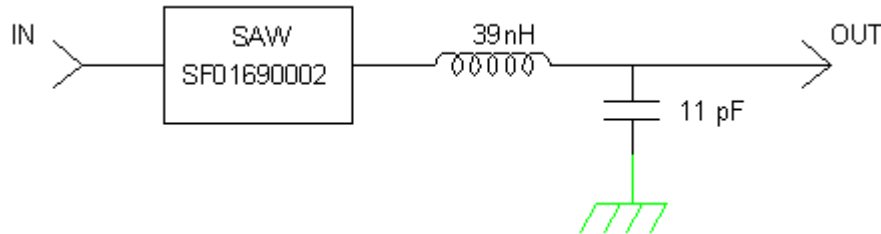


Test Circuit:

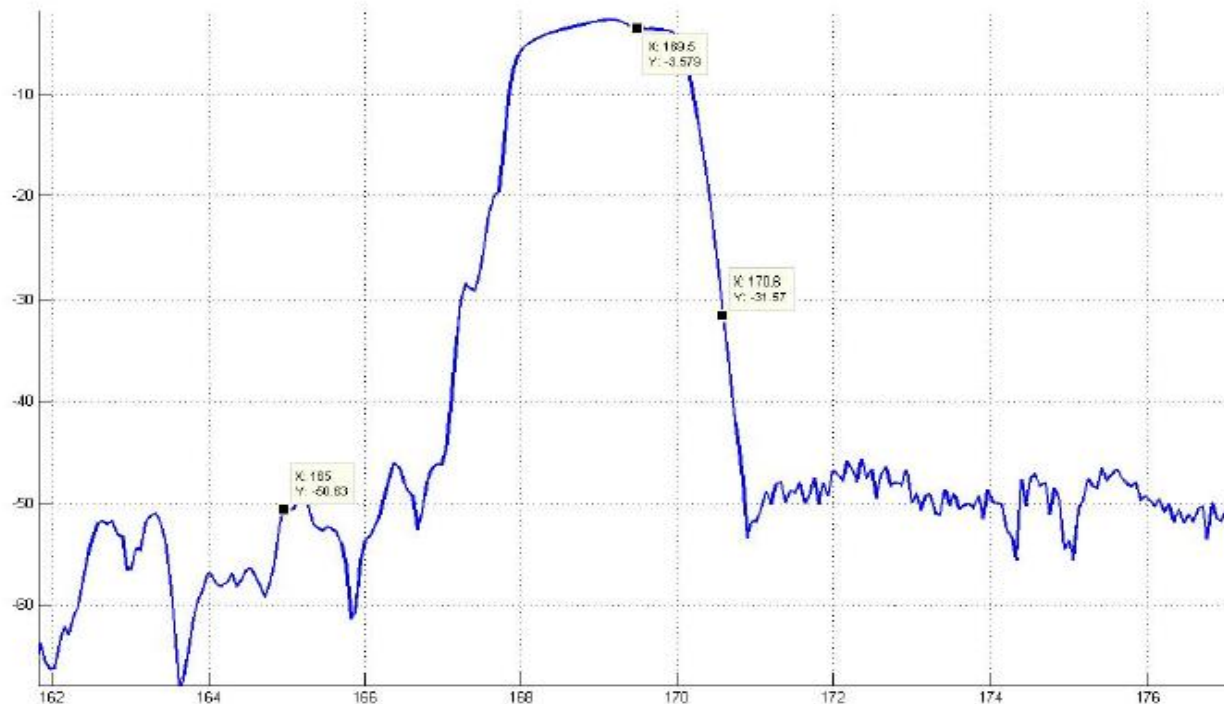


Low Pass Roofing Filter Test Circuit:

Roofing Filter may be added externally in the mother board to extend the ultimate attenuation to 2.5 GHz.



3. Typical Performance (Preliminary)



4. Environmental Characteristics:

4-1 High Temperature Exposure

Subject the device to +85°C for 16 hours. Then release the filter into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 1. Electrical Specifications.

4-2 Low temperature exposure

Subject the device to -40°C for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 1. Electrical Specifications.

4-3 Temperature Cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of +85°C for 30 minutes. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 1. Electrical Specifications.

4-4 Resistance to solder heat

Dip the device terminals no closer than 1.5mm into the solder bath at $260^{\circ}\text{C} \pm 10^{\circ}\text{C}$ for ± 101 sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in 1. Electrical Specifications.

4-5 Solderability

Subject 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 terminals must be covered with new solder. It shall meet the specifications in 1. Electrical Specifications.

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 1. Electrical Specifications.

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 1. Electrical Specifications.

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.

6. Packing:**6-1 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.

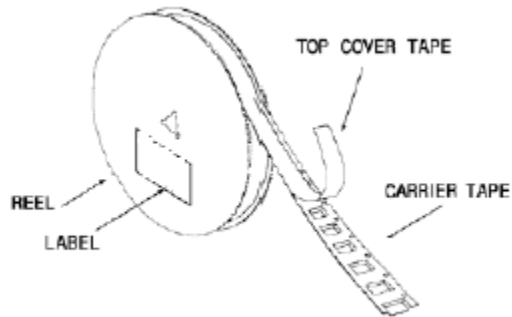
6-2 Reeling Quantity

1000 pcs/reel 7"

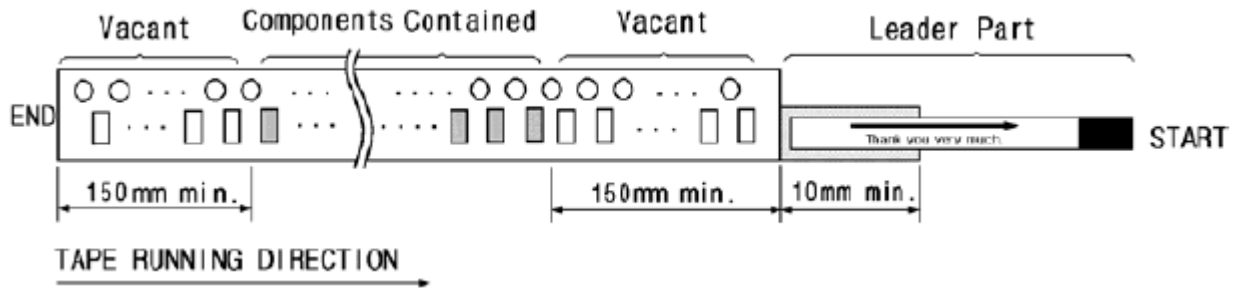
3000 pcs/reel 13"

6-3 Taping Structure

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



(2) Leader part and vacant position specifications.

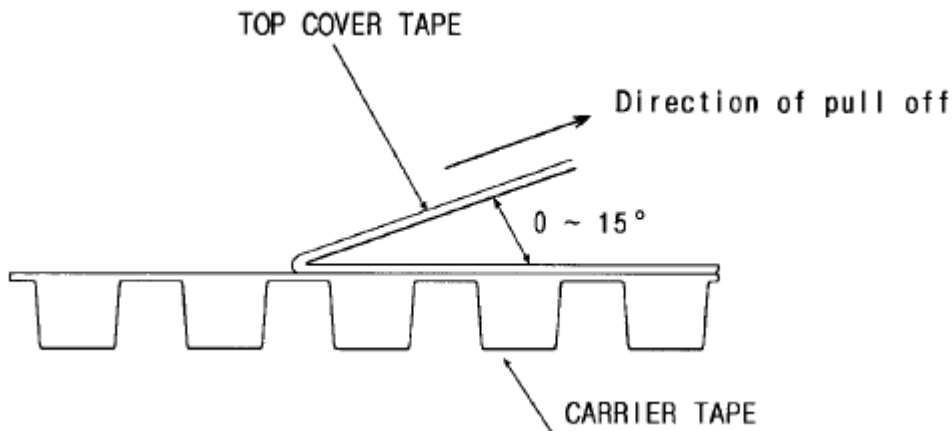


7. Tape specifications:

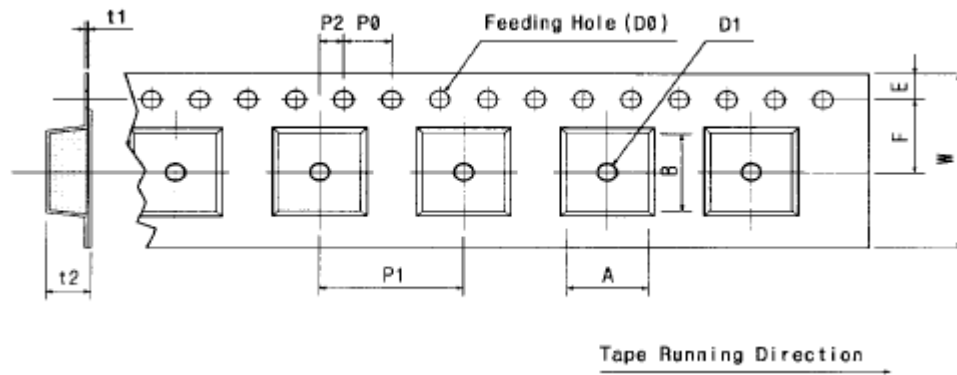
7-1 Tensile strength of Carrier tape: 4.4N/mm width

7-2 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

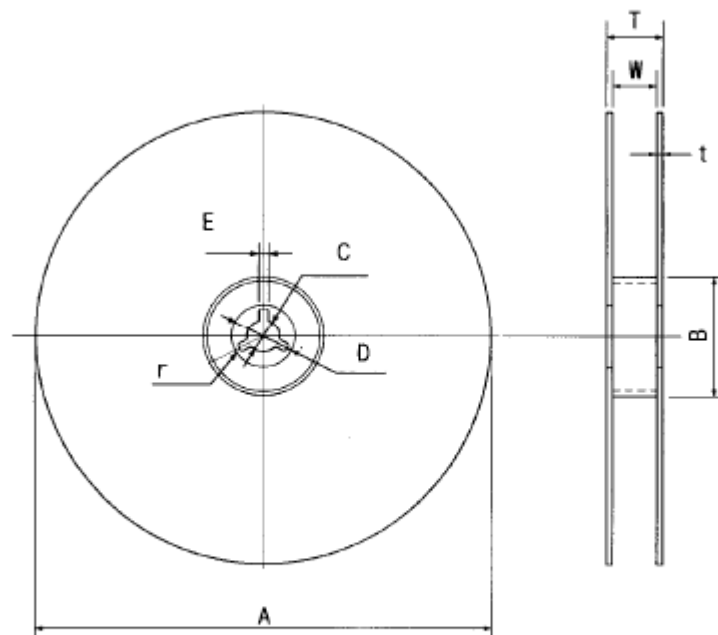


[Unit:mm]

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.