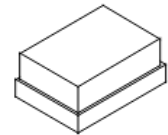**RFMi**
BRAND OF AKOUSTIS

RoHS compliant

SF2415K

869 MHz SAW Filter

SM1411-5

MAXIMUM RATING:

- Input Power Level: 13 dBm
- DC Voltage : 6V
- Operating Temperature: -40°C to +80°C
- Storage Temperature: -40°C to +80°C
- Moisture Sensitivity Level: Level 3

ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single) ： Z_s = 50 Ω

Terminating load impedance(single) : Z_L = 50 Ω

Item		Unit	Min	Type.	Max	Note
Center Frequency	**Fc**	MHz	-	869	-	
Insertion Loss (868 to 870 MHz)	**IL**	dB		3.0	3.5	
Amplitude ripple (868 to 870 MHz)				0.5	1.2	
VSWR (868 to 870 MHz)				1.5	2.0	
Attenuation						
50 ~ 791 MHz		dB	45	50		
791 ~ 835 MHz		dB	45	50		
835 ~ 848 MHz		dB	43	48		
847 ~ 862 MHz 30dB for -40°C to +40°C		dB	30*	35		
880 ~ 883 MHz		dB	35	45		
883 ~ 1000 MHz		dB	49	54		
Temperature coefficient		ppm/°C	-36			
Package size		mm	1411			

NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. This component was always RoHS compliant from the first date of manufacture.
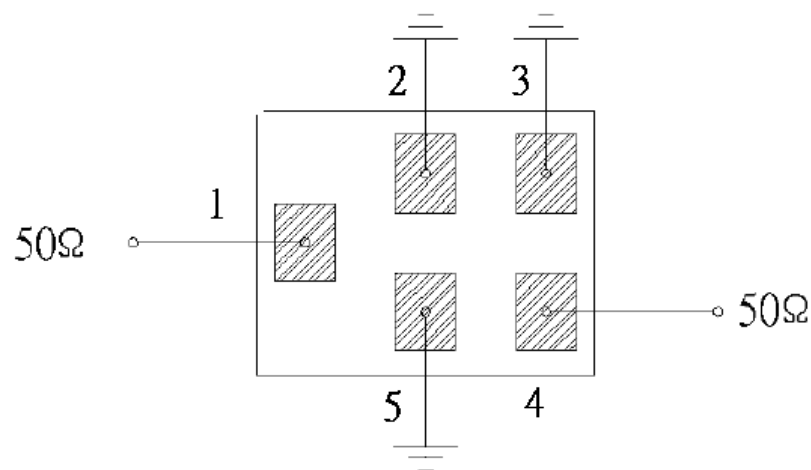
OUTLINE DRAWING:
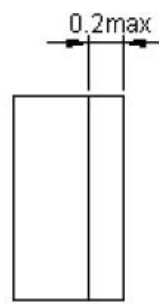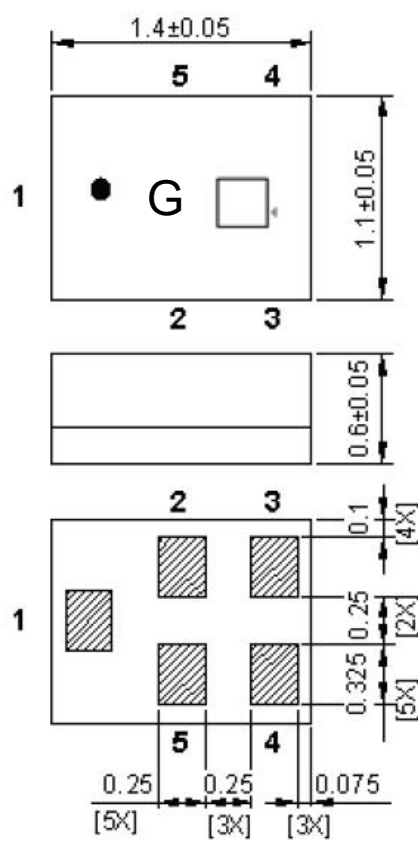
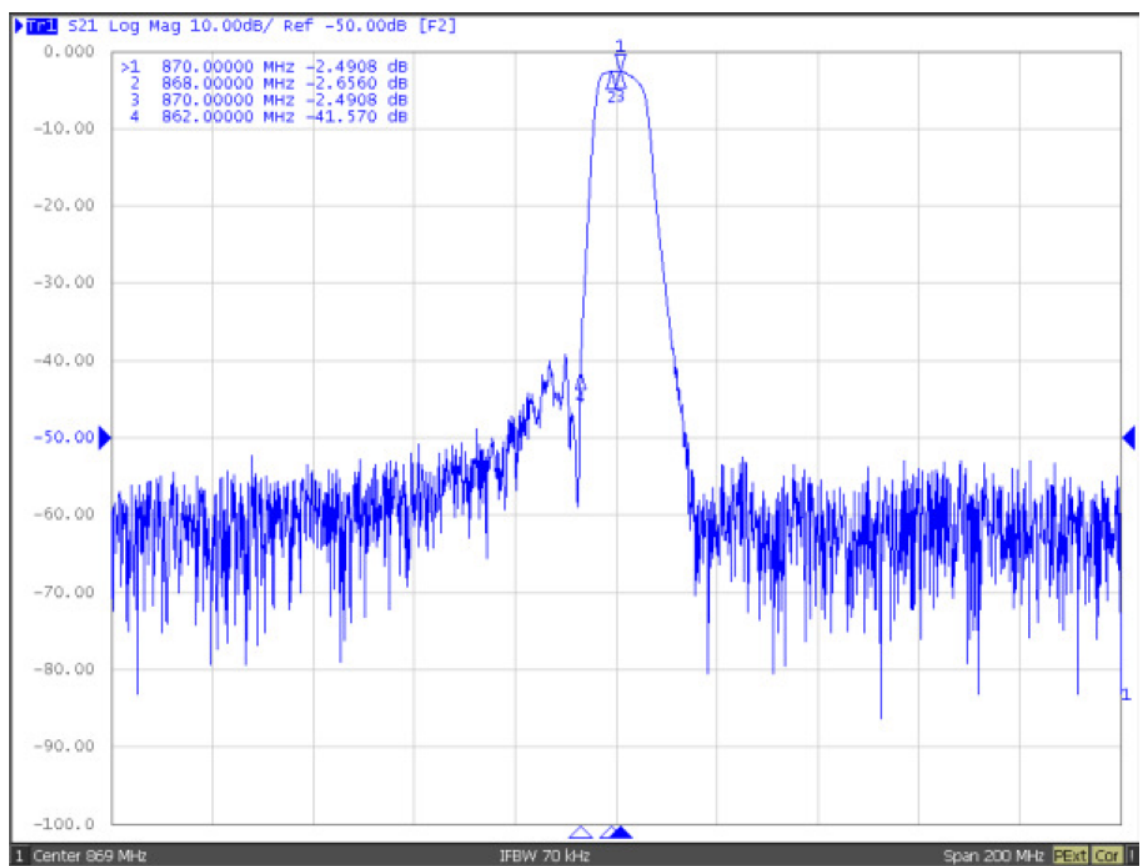

Symbol:

G - assigned by manufacturer

☐ Year/Month code

All tolerances are +/-0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.
1 to 5 : Pin No.
Unit : mm

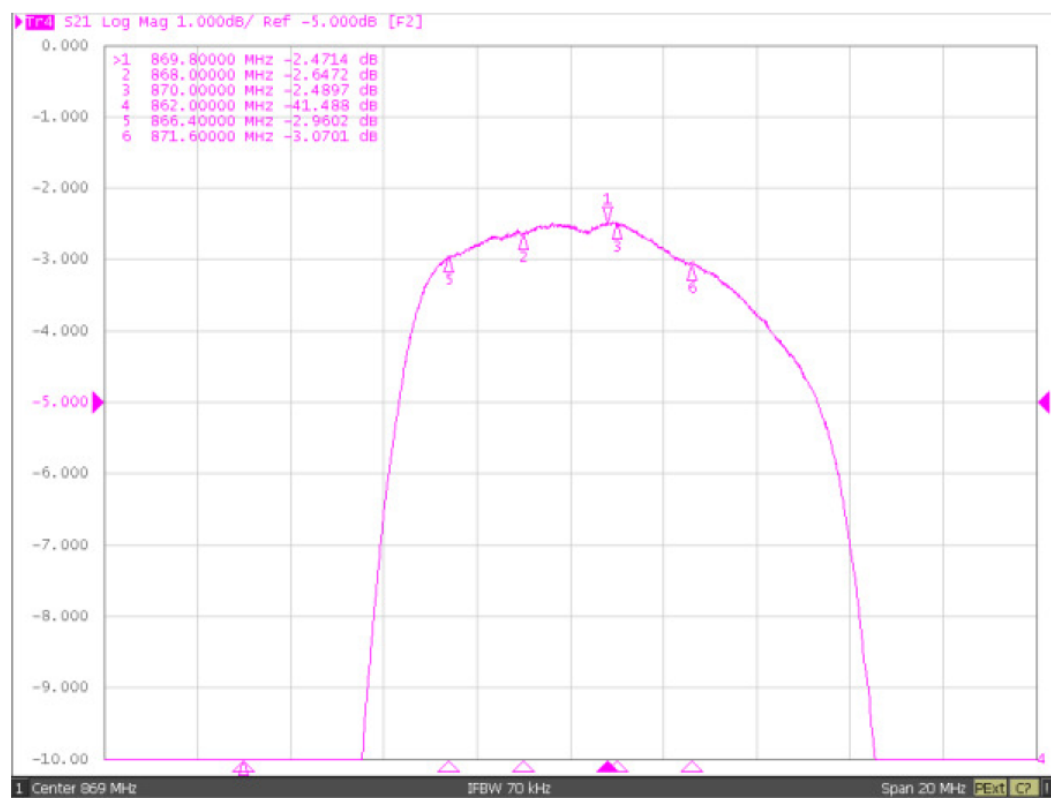| Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

MEASUREMENT CIRCUIT:

Frequency Characteristics:

S21 Wide

Tr4 S21 Log Mag 1.000dB/ Ref -5.000dB [F2]

>1	869.80000 MHz	-2.4714 dB
2	868.00000 MHz	-2.6472 dB
3	870.00000 MHz	-2.4897 dB
4	862.00000 MHz	-41.488 dB
5	866.40000 MHz	-2.9602 dB
6	871.60000 MHz	-3.0701 dB

1 Center 869 MHz   IFBW 70 kHz   Span 20 MHz FExt C? I

S21 Wide

Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]

>1	100.00000 kHz	-52.956 dB
2	868.00000 MHz	-2.6166 dB
3	870.00000 MHz	-2.4878 dB
4	862.00000 MHz	-37.785 dB

1 Start 100 kHz   IFBW 5 kHz   Stop 3 GHz C1 I
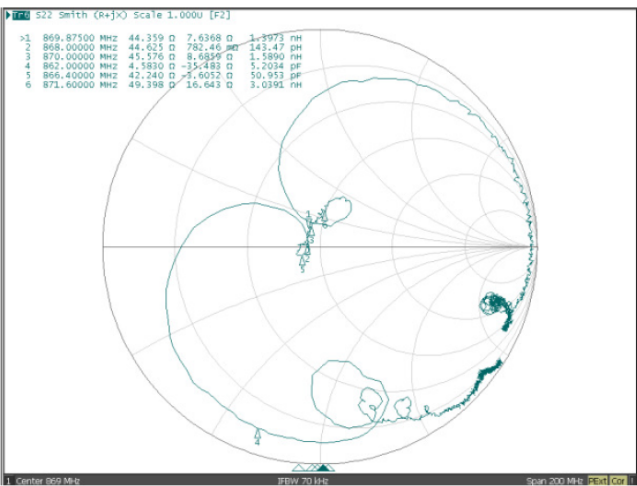
S11/S22 response: (span 400MHz)

PCB Footprint:

: Land Pattern

www.rfmi.co
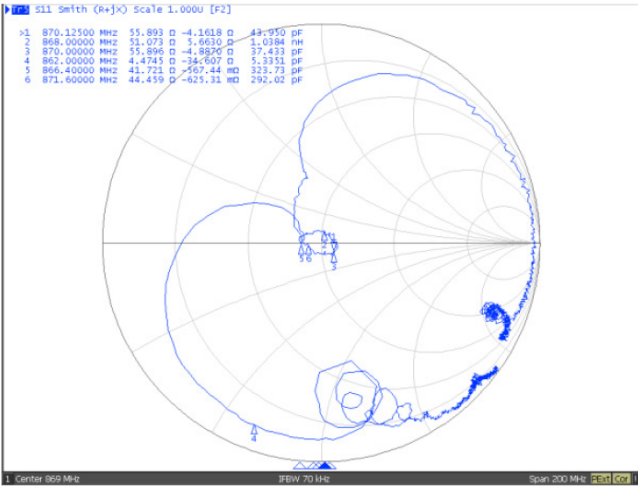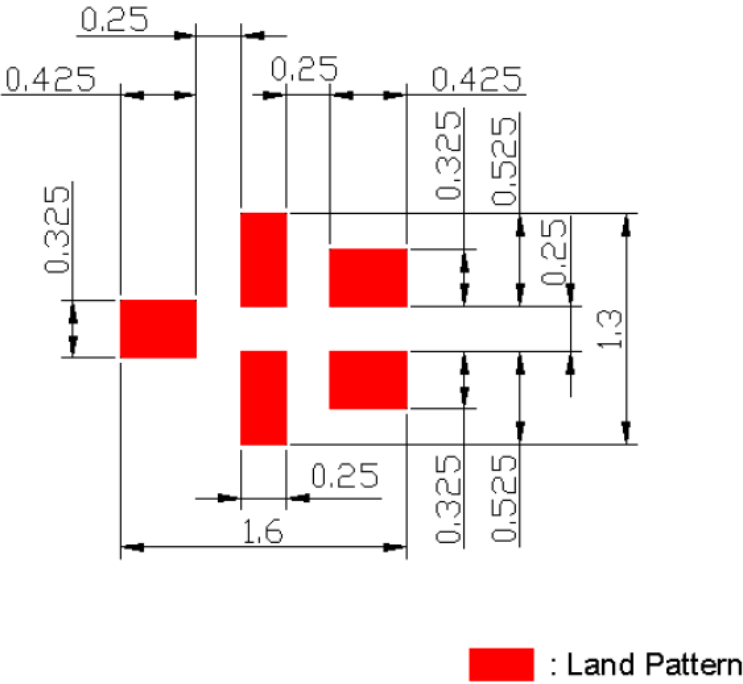
PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION

Direction of Feed
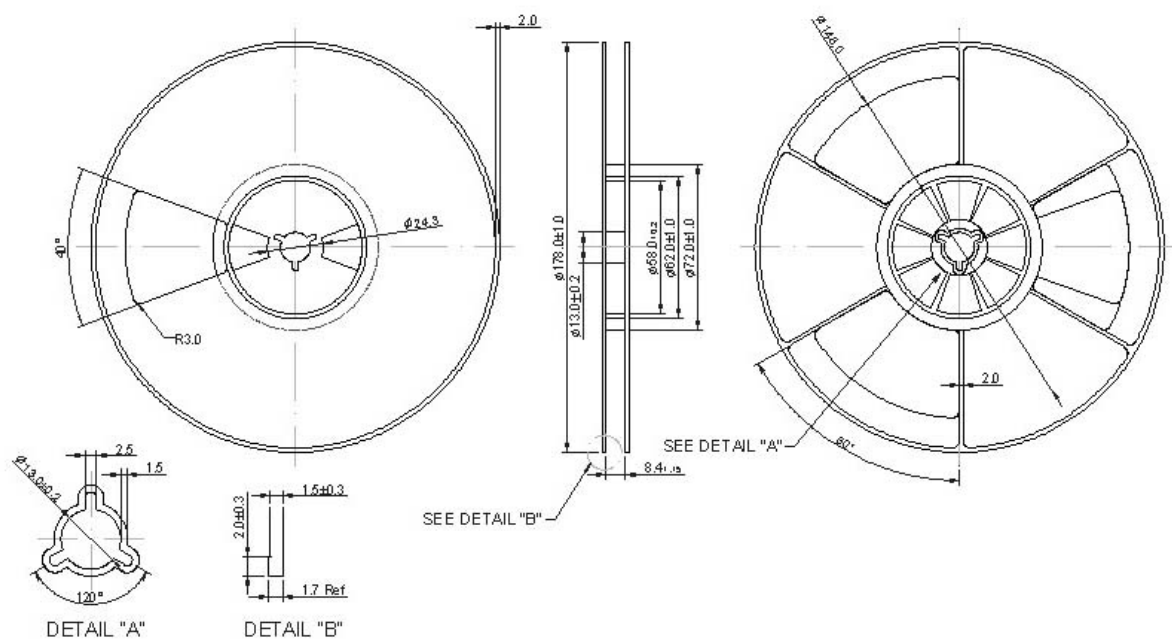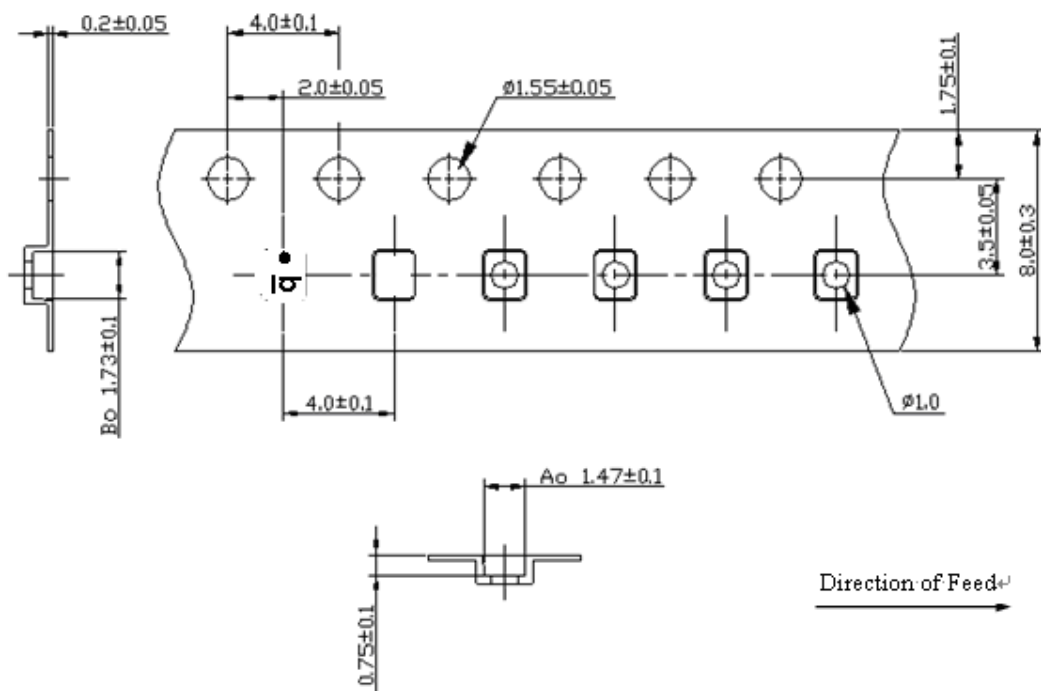
Recommended Reflow Profile:

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.