



**BF2001G** 

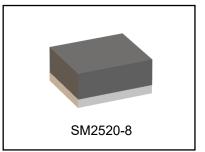
Akoustis product A10252 recommended for new designs (click here)

- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 3

5250 MHz BAW Filter

**Absolute Maximum Ratings** 

Rating	Value	Units
Maximum Input Power	30	dBm
Maximum DC Voltage Between any Two Terminals	0	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +125	°C
Case Style: SM2520-8 (2.5 x 2.00 nominal footprint)	•	



#### **Electrical Characteristics**

Terminating source impedance:  $Zs = 50 \Omega$ Terminating load impedance:  $Z_L = 50 \Omega$ 

Parameters Description		Unit	Min.	Type.	Max.	Note
Center Frequency	Fc	MHz	-	5250	-	-
Insertion Loss (5170 ~ 5330 MHz)	ī	dB	-	1.8	2.5	(*1)(*2)(*3)
Amplitude Ripple (5170 ~ 5330 MHz)		dB	-	0.3	1.5	(*1)(*2)(*3)
<b>Return Loss</b> (5170 ~ 5330 MHz)		dB	10	15	-	(*1)(*2)(*3)
Attenuation (Reference level from 0 dB)						
30 ~ 2700 MHz		dB	28	34	-	-
3300 ~ 3700 MHz		dB	30	36	-	-
5490 ~ 5850 MHz		dB	40	46	-	-
5900 ~ 8500 MHz		dB	35	40	-	-

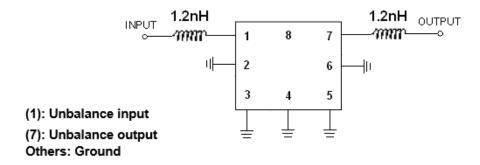
#### Note:

- (\*1) The specifications are averaged over specified pass band frequency.
- (\*2) The specifications include loss that comes from the test board and connector.
- (\*3) The specifications are 25°C only.

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES:

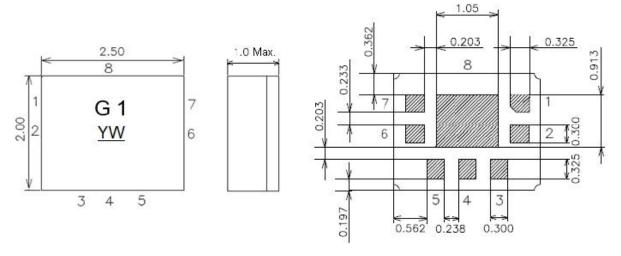
- 1. The design, manufacturing process, and specifications of this device are subject to change.
- 2. US or International patents may apply.
- 3. This component was always RoHS compliant from the first date of manufacture.

### **Measurement Circuit**



### **Outline Drawing**

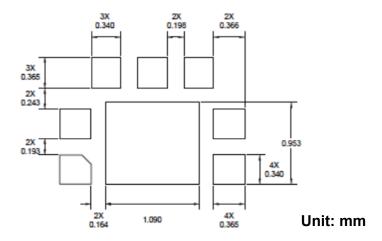
Y = Year W = Week



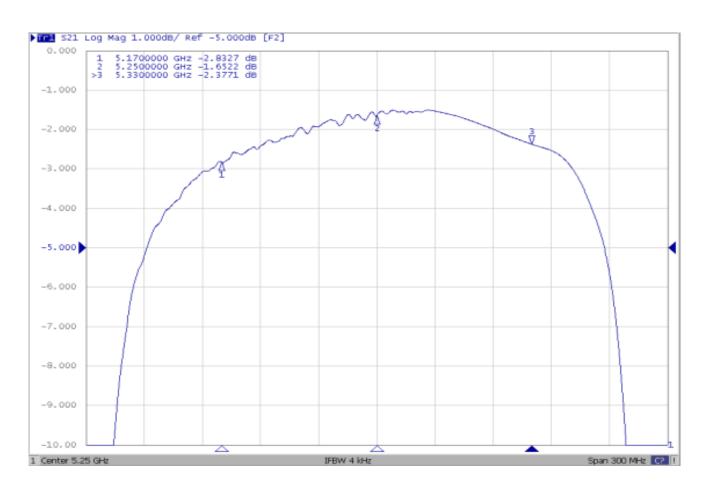
# All tolerances are +/-0.1 mm unless otherwise specified. Unit: mm

Pin No.	Symbol	Func	
1	IN	Input	
2	ND	Ground	
3	ND	Ground	
4	ND	Ground	
5	ND	Ground	
6	ND	Ground	
7	OUT	Output	
8	ND	Ground	

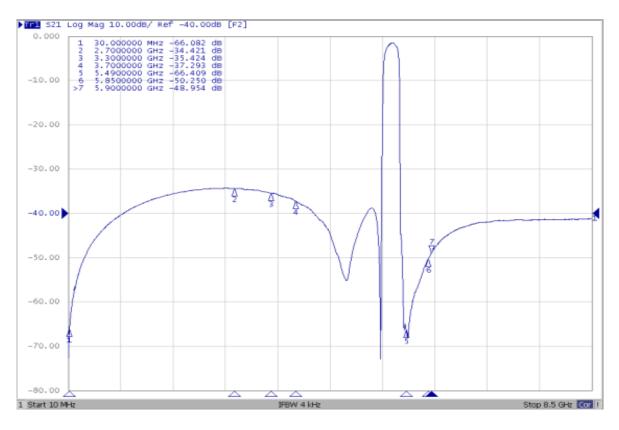
# **PCB Footprint**



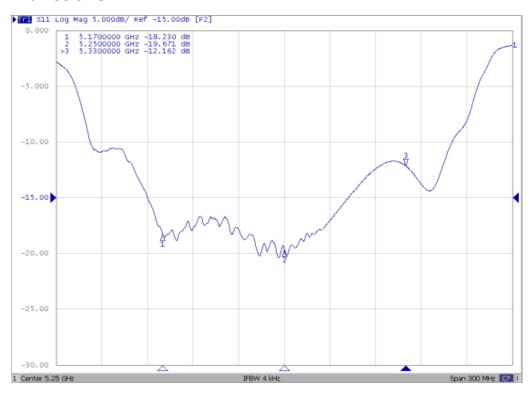
# **Frequency Characteristics**

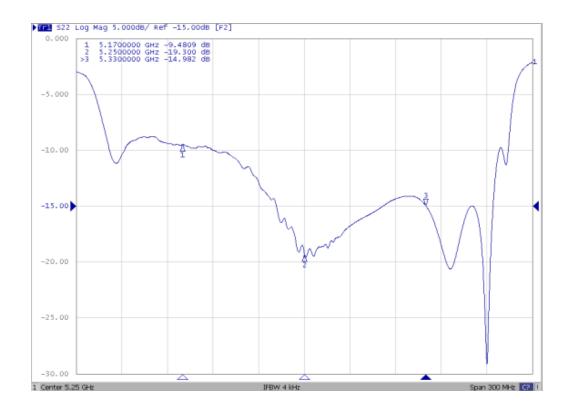






### **Reflection Functions**



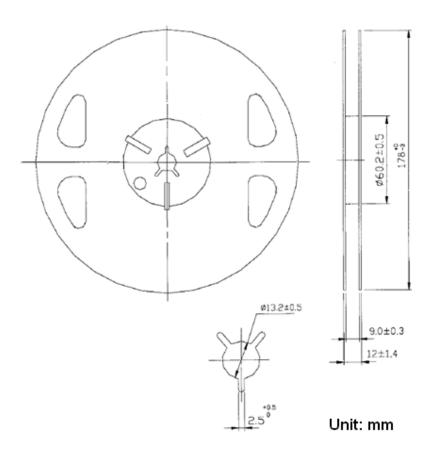


# Packing:

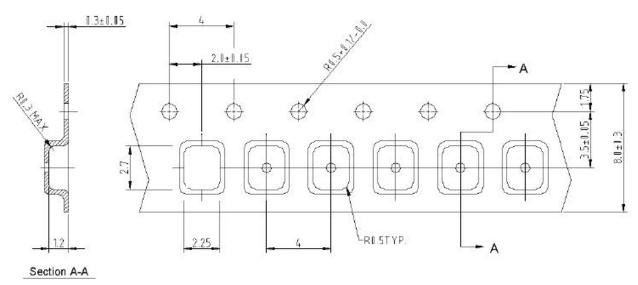
### **Reel Dimension**

Reel Count: 7" = 2000 13" = 10,000

Tape and Reel Standard per ANSI/EIA-481



# **Tape Dimension**



#### **Recommended Reflow Profile**

### Parameter

Max Ramp Up Rate
Soak Temp Time Ts(min) - Ts (max)
Max Soak Time Ts
Liquidous Temp TL
Max Time Above TL
Max Peak Temperature TP
Max Time at Peak TP
Max Ramp Down Rate

## Eutectic Sn/Pb

6 Deg C/Second 135 - 155 Deg C 2 minutes 183 Deg C 150 Seconds 225 Deg C 30 Seconds 10 Deg C/Second

### Pb Free

6 Deg C/Second 150-200 Deg C 3 minutes 220 Deg C 150 Seconds 260 Deg C 30 Seconds 10 Deg C/Second

