

MESSRS. Customer

SPECIFICATION FOR APPROVAL

Product	ELECTRO MAGNETIC INDICATOR (SMD)
Part No.	ADI-F13M5B
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
		



Advanced Acoustic Technology Corporation



ISO 9001 Certified

ISO 14001 Certified

Head Office / 2F, No.207, Sec. 6, Chung Shan N. Rd., Taipei, Taiwan

Tel: +886-2-8866-5255

Fax: +886-2-8866-5250

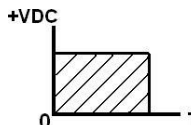
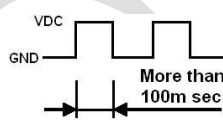
RoHS



RoHS

1. SPECIFICATION

ADI-F13M5B

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	5	
02	Operating Voltage	V	4 ~ 7	
03	Consumption Current	mA (Max)	30	Rated Voltage
04	Resonant Frequency	Hz	2300 ± 300	Rated Voltage
05	Response times	ms	≥ 100	
06	Sound pressure level	dB(A) Min.	85	Distance at 10cm Rated Voltage
07	Operating Temp.	°C	-30 ~ +70	
08	Storage Temp.	°C	-40 ~ +85	
09	Weight	g	1.8 ± 0.2	

2. MEASURING METHOD

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

JUDGEMENT

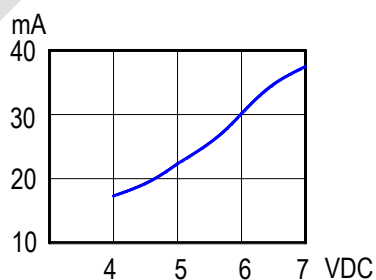
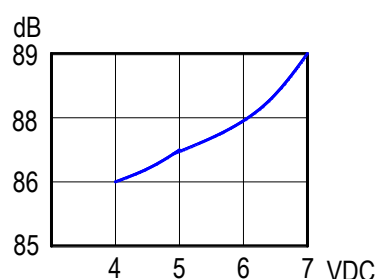
Temperature : 20±3°C

Relative humidity : 60% ~ 70%,

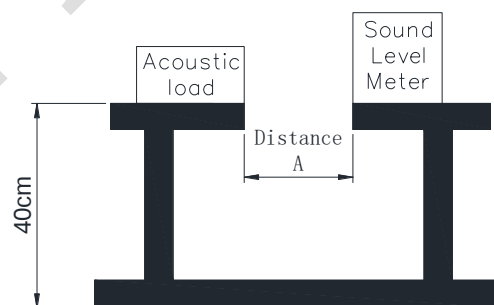
Atmospheric pressure : 860mbar to 1060mbar

2-3. SPL Curve (For Reference Only)

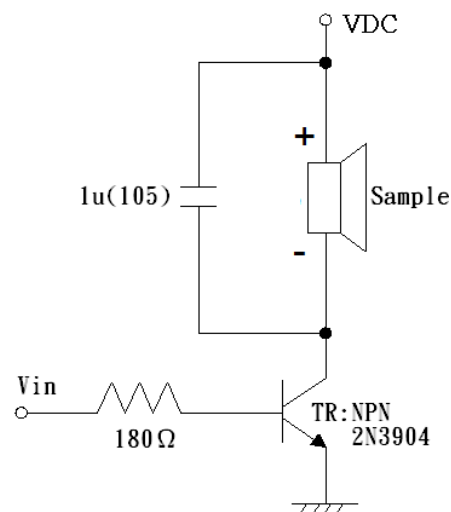
Test distance : **A=10 cm**



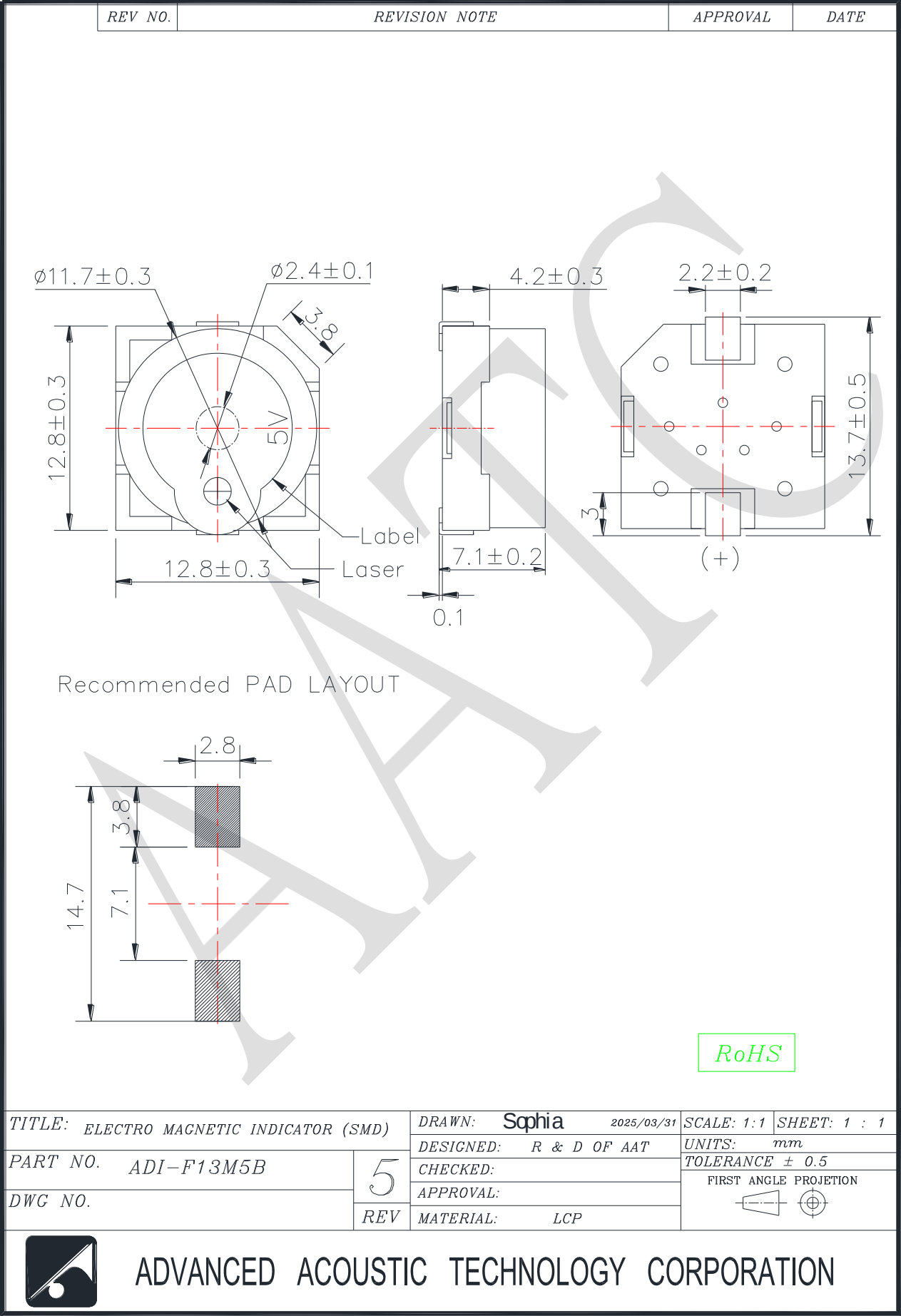
2-2. Standard Test Fixture



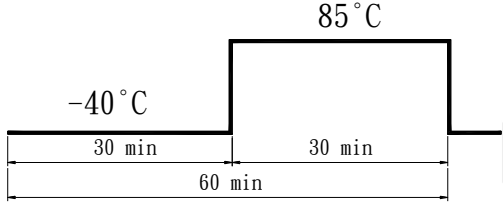
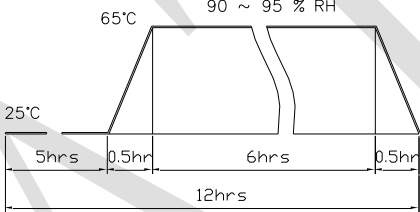
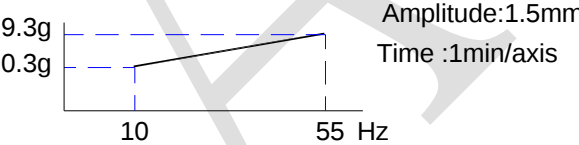
2-4. Recommend drive circuit



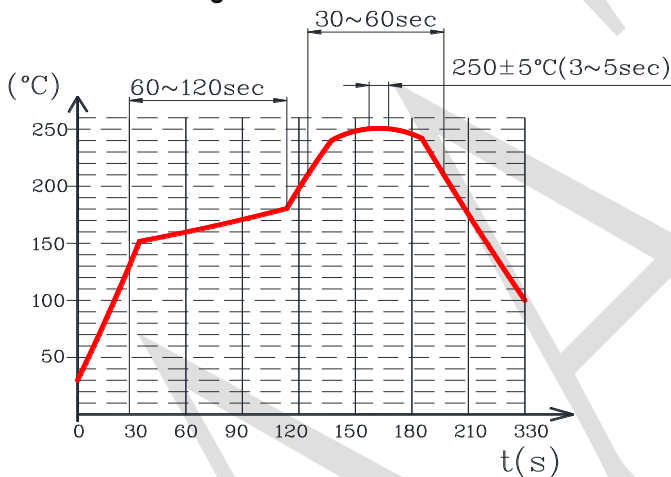
3. DIMENSIONS



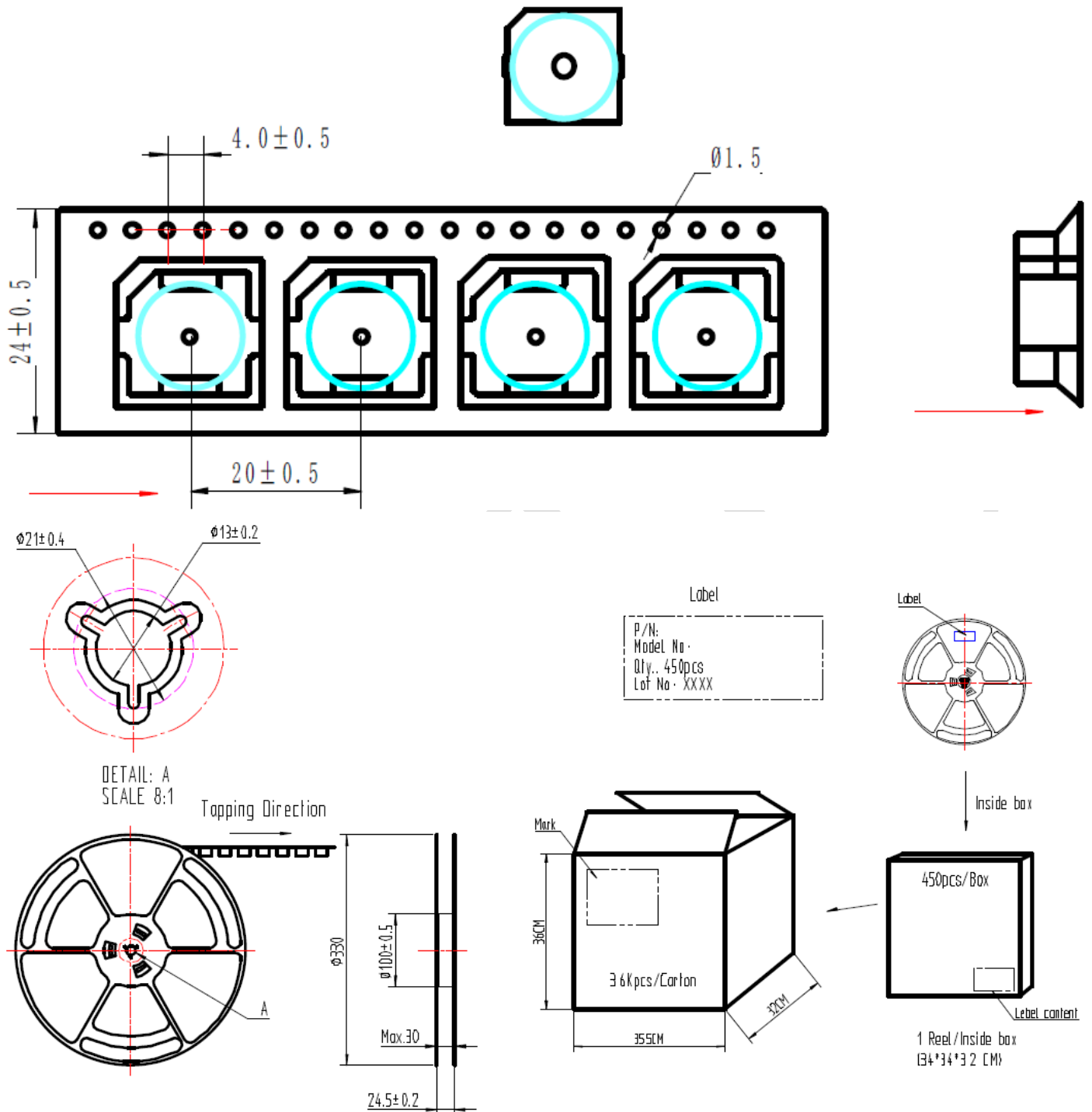
4. RELIABILITY TESTS

Item		Test conditions	Evaluation standard
01	High temp. Storage life	The part shall be capable of withstanding a storage Temperature of +85°C for 96 hours.	1. After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L 2. S.P.L shall be ± 7 dB.
02	Low temp. Storage life	The part shall be capable of withstanding a storage Temperature of -40°C for 96 hours.	
03	Temp. cycle	The part shall be subjected 10 cycles. One cycle shall of ; 	
04	Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall of; 	
05	Vibration	 Amplitude:1.5mm Time :1min/axis Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours).	
06	Lead strength	Pull lead with a force of 9.8N, on the direction of the lead axis for 10 :10 $\pm$ 1 sec	1. After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L 2. S.P.L shall be ± 7 dB.
07	Free drop	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 1 times in 3 Direction each (X.Y.Z). (a total of 3 times).	
	Free drop (Packing)	The part only shall be dropped from a height of 100cm onto a 10mm thick wooden board 1 times in 3 axes (X.Y.Z). (a total of 3 times).	

5. CAUTIONS FOR USE

01	As this product is not protected from foreign material entering, please make sure that any foreign materials do not enter this product in your production processes. (e.g. magnetic powder, washing solvent, flux, corrosive gas)
02	The functional degradation may occur if foreign material enter it. (e.g. SPL down)
03	Wash ability Solvent : deionizer water Solvent temp : $55\pm 5^{\circ}\text{C}$ Soaking time : 5 ± 0.5 min. After the washing process, be sure to tear off the label.
04	After solder bath, the cooling time must be longer than 2 hours before function test.
05	Soldering profile Reflow soldering condition : $250\pm 5^{\circ}\text{C}$, 3~5 Sec. 
06	Soldering with iron Hand soldering : $360\pm 10^{\circ}\text{C}$ / ≤ 2 Sec. Recommend using constant searing-iron
07	AATC reserves the right to change product material without prior notice, guaranteeing the same specification. Materials are subject to change due to environmental regulations, sourcing, and process improvements.
08	If you need more information, please contact our technology department, thank you

6. PACKING



1. 450 PCS / Reel
2. Inner box: 76 * 45.5cm
3. Outer box: 35 * 32 * 36cm