




MESSRS. Customer

SPECIFICATION FOR APPROVAL

Product	PIEZO TRANSDUCER
Part No.	AZ-13B481WV3
Customer Approval	
Customer Part No.	

Approved By	Checked By	Made By
		



Advanced Acoustic Technology Corporation



ISO 9001 Certified

ISO 14001 Certified

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RoHS



ADVANCED ACOUSTIC TECHNOLOGY CORP.

1. SPECIFICATION

AZ-13B481WV3

ITEM		UNITS	SPECIFICATIONS	CONDITIONS
01	Rated Voltage	V	10	 Square wave 1/2 duty.
02	Operating Voltage	V	1 ~ 25	
03	Rated Frequency	Hz	4800	
04	Sound pressure level (Distance at 10cm)	dB(A) (Min)	80	Rated voltage, rated frequency.
05	Consumption Current	mA (Max)	5	
06	Capacitance	pF	14000±30%	At 120 Hz
07	Operating Temp.	°C	-20 ~ +60	
08	Storage Temp.	°C	-30 ~ +70	
09	Weight	g	0.4 ± 0.2	
10	Housing Material		ABS	

2. MEASURING METHOD

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity: 45% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

JUDGEMENT

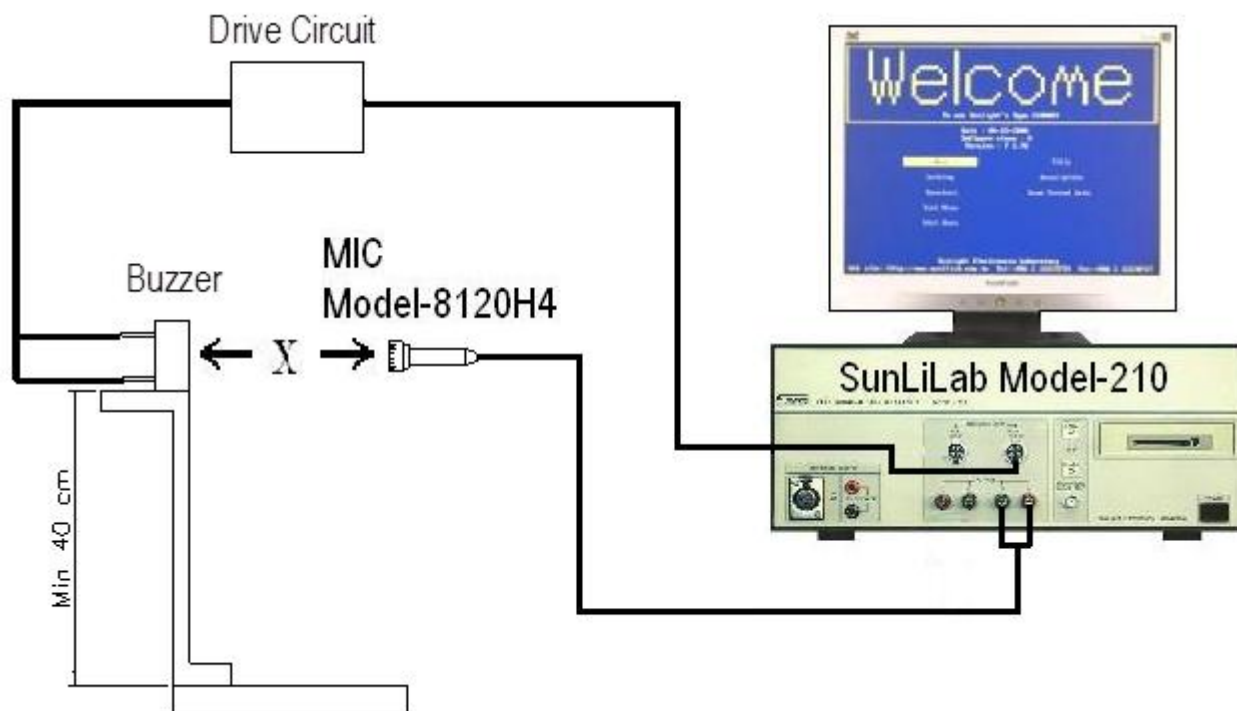
Temperature : 20±3°C

Relative humidity: 60% ~ 70%,

Atmospheric pressure: 860mbar to 1060mbar

2-2. Standard Test Fixture

Distance: $X=10\text{ cm}$

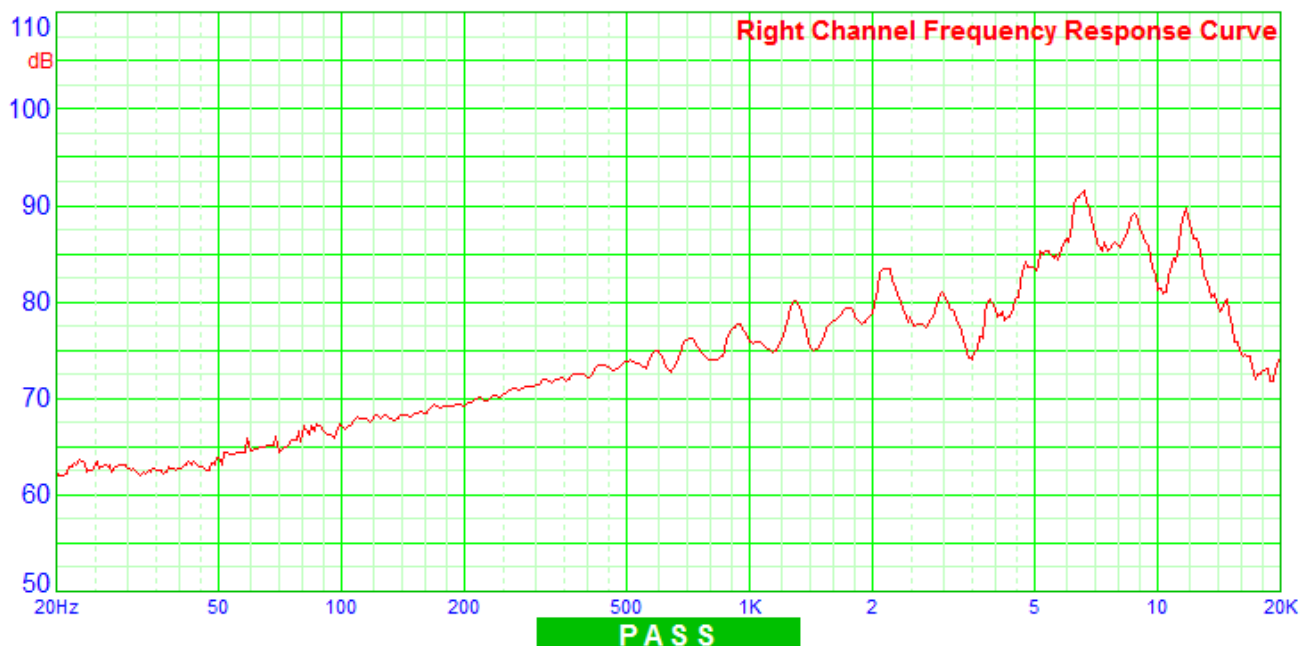


2-3. Frequency Response Curve

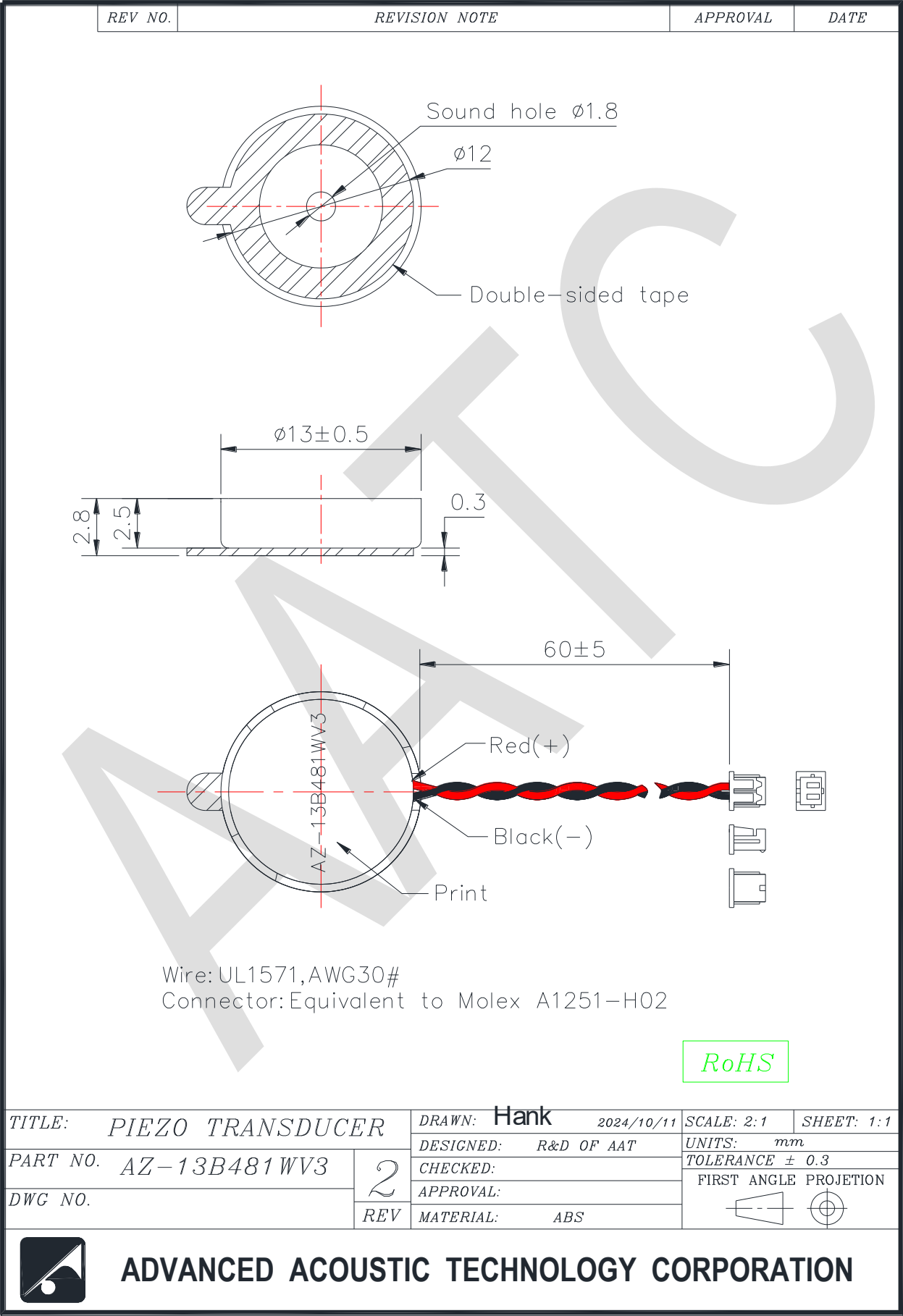
Type 2100PIE [Run] Piezo Frequency Response Test

Firm:2017 Object:2017 2100PIE F 1.00 10-23-2018 15:42:13
S= 83.6dB/ 4795Hz/5000.0mVP FR:P

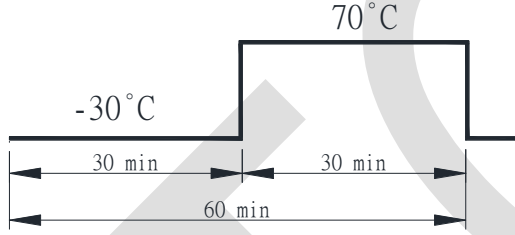
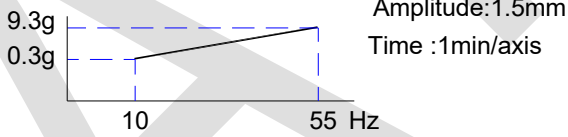
1/48 Oct.



3. DIMENSIONS



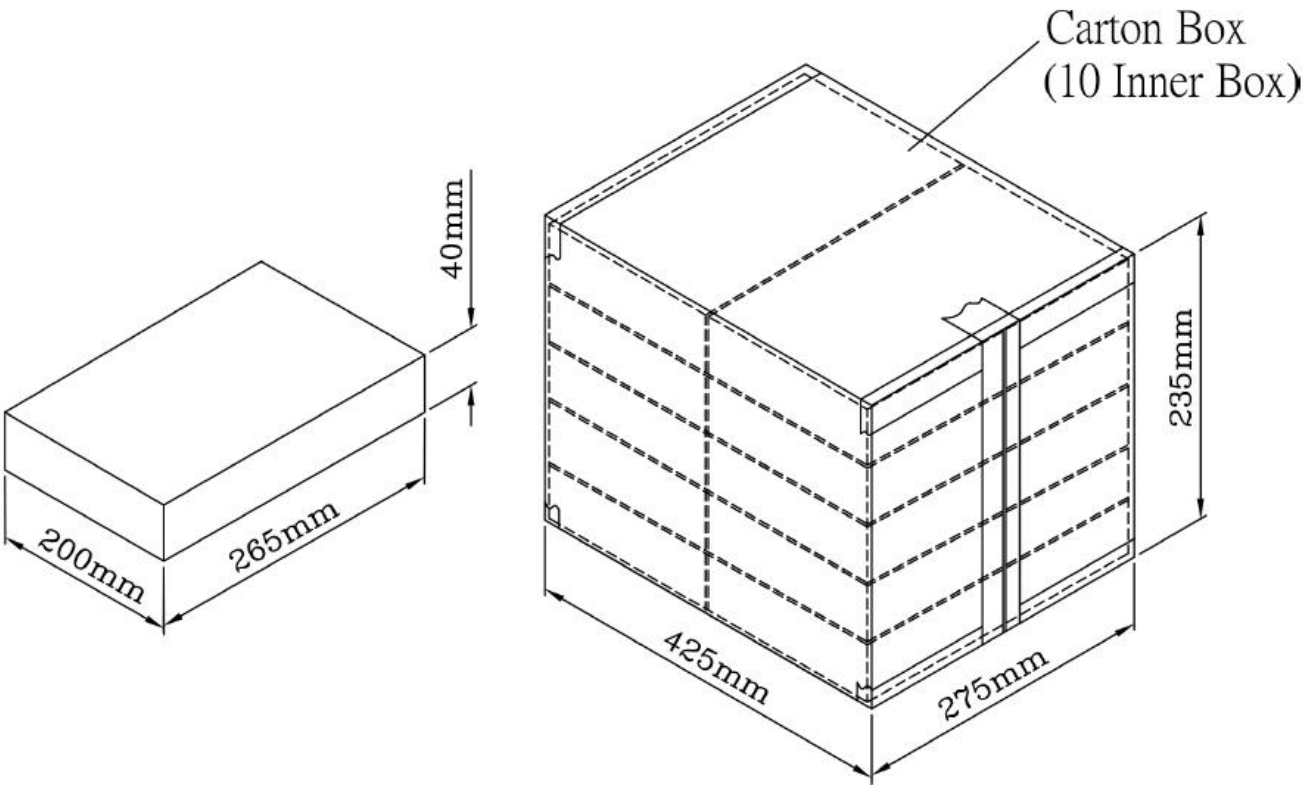
4. RELIABILITY TESTS

Item		Test conditions	Evaluation standard
01	High temp. Storage life	The part shall be capable of withstanding a storage Temperature of +70°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 -30°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 with 90~95% R.H at +40°C for 96 hours.	
05	Lead Strength	Pull lead with a force of 9.8N, on the direction of the lead axis for 10 \pm 1 sec	
06	Vibration	 <p>Amplitude: 1.5mm Time : 1min/axis</p> <p>Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours).</p>	
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).	
08	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	Washing of the component is not acceptable. Because it is not seal.
04	After solder bath, the cooling time must be longer than 2 hours before function test.
05	Soldering with iron Hand soldering : $360\pm 10^{\circ}\text{C} / \leq 2 \text{ Sec.}$ Recommend using constant searing-iron
06	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.
07	If you need more information, please contact our technology department, thank you

6. PACKING



Inner Box	200mmx265mmx40mm	2x500PCS=1,000PCS
Carton Box	425mmx275mmx235mm	10x 1000PCS=10,000PCS