

# *MESSRS.*

---

## SPECIFICATION FOR APPROVAL

## 承 認 書

Product	MAGNETIC BUZZER (SMD)
Part No.	AD-8501-CX4
Customer Approval	

Approved By	Checked By	Made By
工程 部 王台平 AUG-30-2004	工程 部 劉民祥 AUG-30-2004	工程 部 許俊程 AUG-30-2004



**ADVANCED ACOUSTIC TECHNOLOGY CORP.**

**苙 翔 科 技 股 份 有 限 公 司**



ISO 9001 Certified

2F, No.207, Sec. 6, Chung Shan N. Rd., Taipei, Taiwan, R.O.C.

Tel: +886-2-88665255

Fax: +886-2-88665250

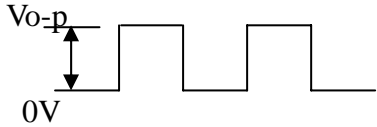
E-mail: [aat\\_mail@seed.net.tw](mailto:aat_mail@seed.net.tw)

# AD-8501-CX4

## FEATURES

Compact : rich sound magnetic buzzer.

Applications : Mobile phone , PDA , pager etc.

Items		Units	Specifications	Conditions
01	Rated Voltage	Vo-p	1.5	
02	Operating Voltage	Vo-p	1.0~3.0	
03	Consumption Current	mA (max)	100	Standard State, Standard Drive Circuit. Rated Voltage, Distance at 10 cm free air 2730Hz, Square Wave 1 / 2 Duty
05	Sound Pressure Label	dB (min)	87	
06	Resonant Frequency	Hz	2730±200	
04	Coil Resistance	Ω	6±1	At Basic State
07	Operating Temp.	°C	-40 ~ +85	
08	Storage Temp.	°C	-50 ~ +95	
09	Dimension	mm	8.5 x 8.5 x 4	See attached drawing.
10	Weight	Gram	0.6	

### Standard condition:

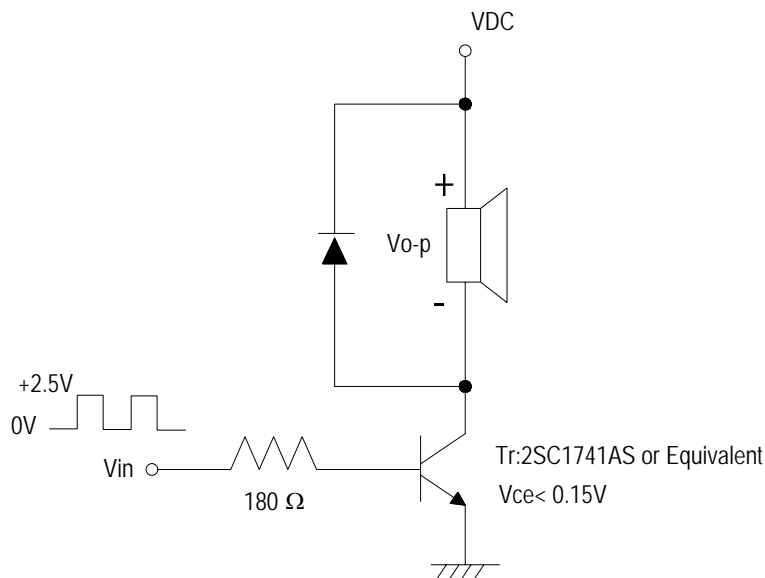
Ordinary Temp.(15~35°C), Humidity(25~85%RH), Air Pressure(860~1060HPa)

In case of doubtful judgment, the test is re-performed under basic state.

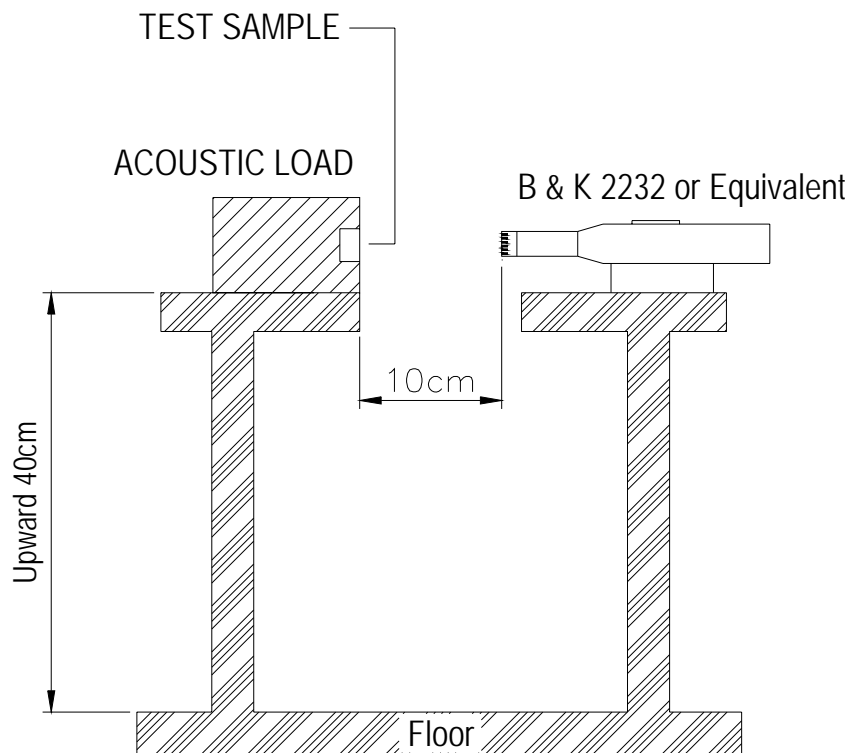
### Basic State:

Temp.(20±2°C), Humidity(60~70%RH),Air Pressure(860~1060HPa).

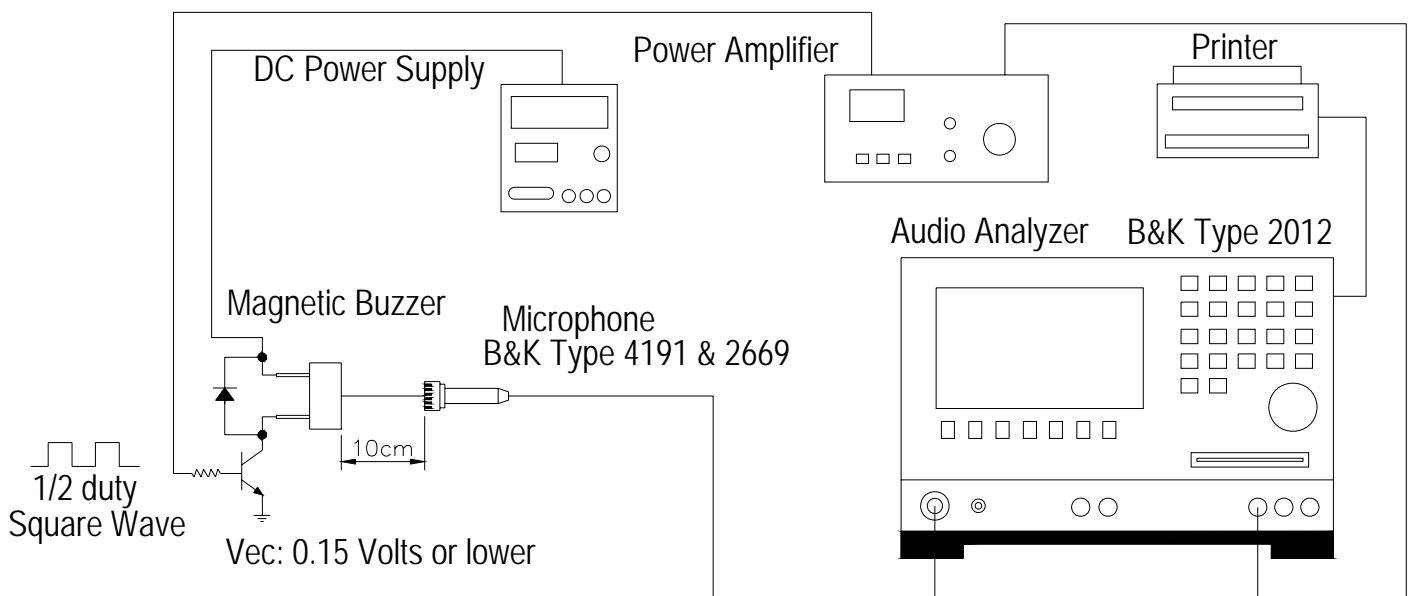
### Standard Drive Circuit:



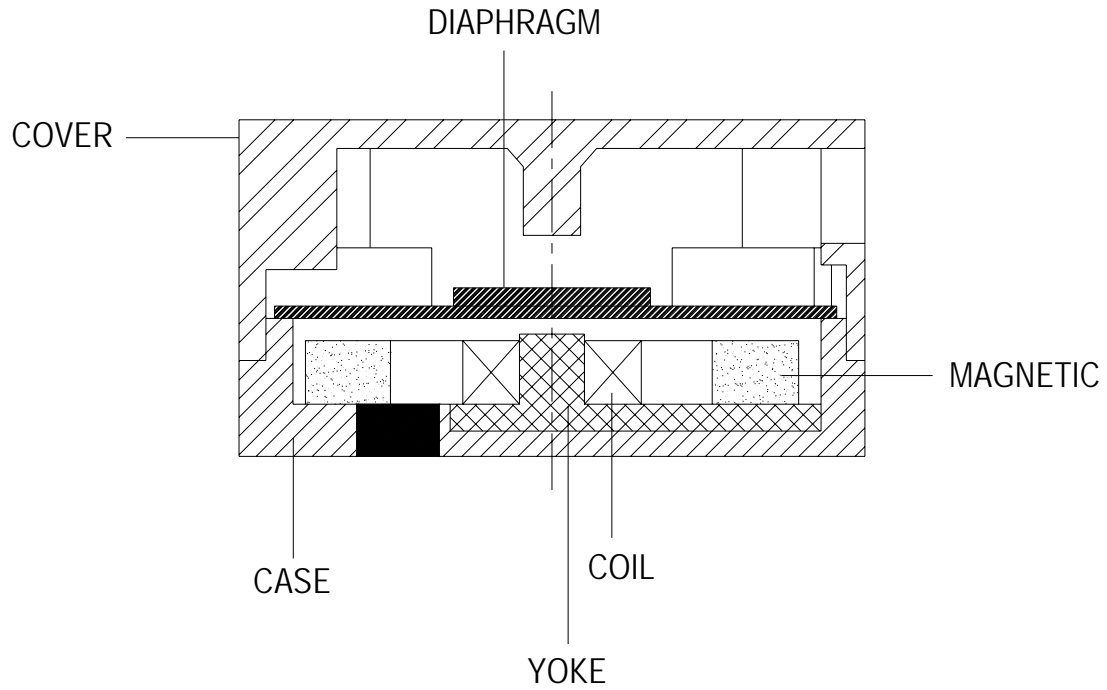
# STANDARD TEST FIXTURE



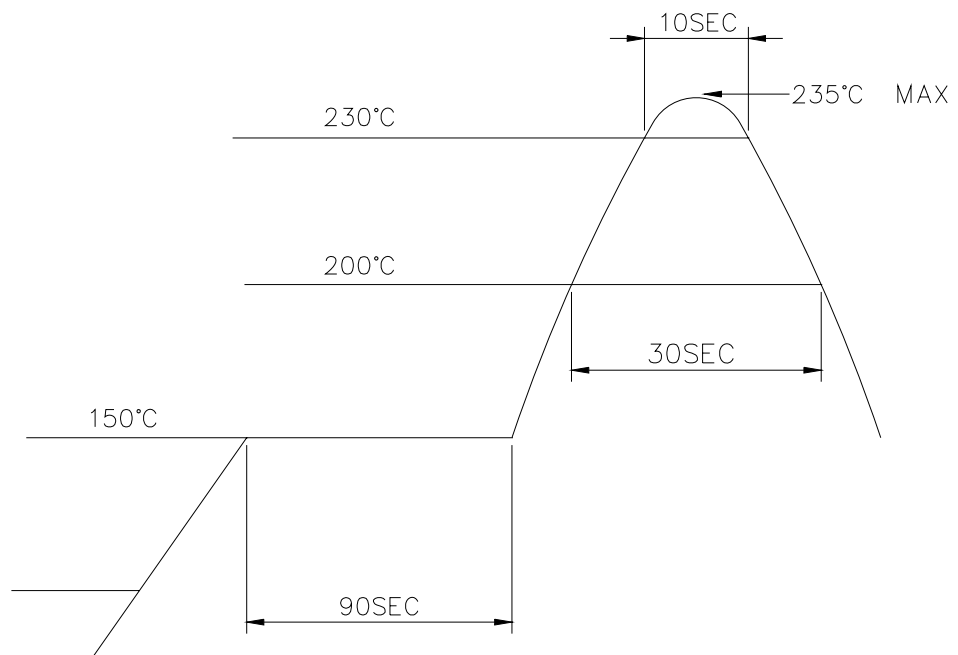
## Standard test condition of magnetic buzzer



# STRUCTURAL SPECIFICATION

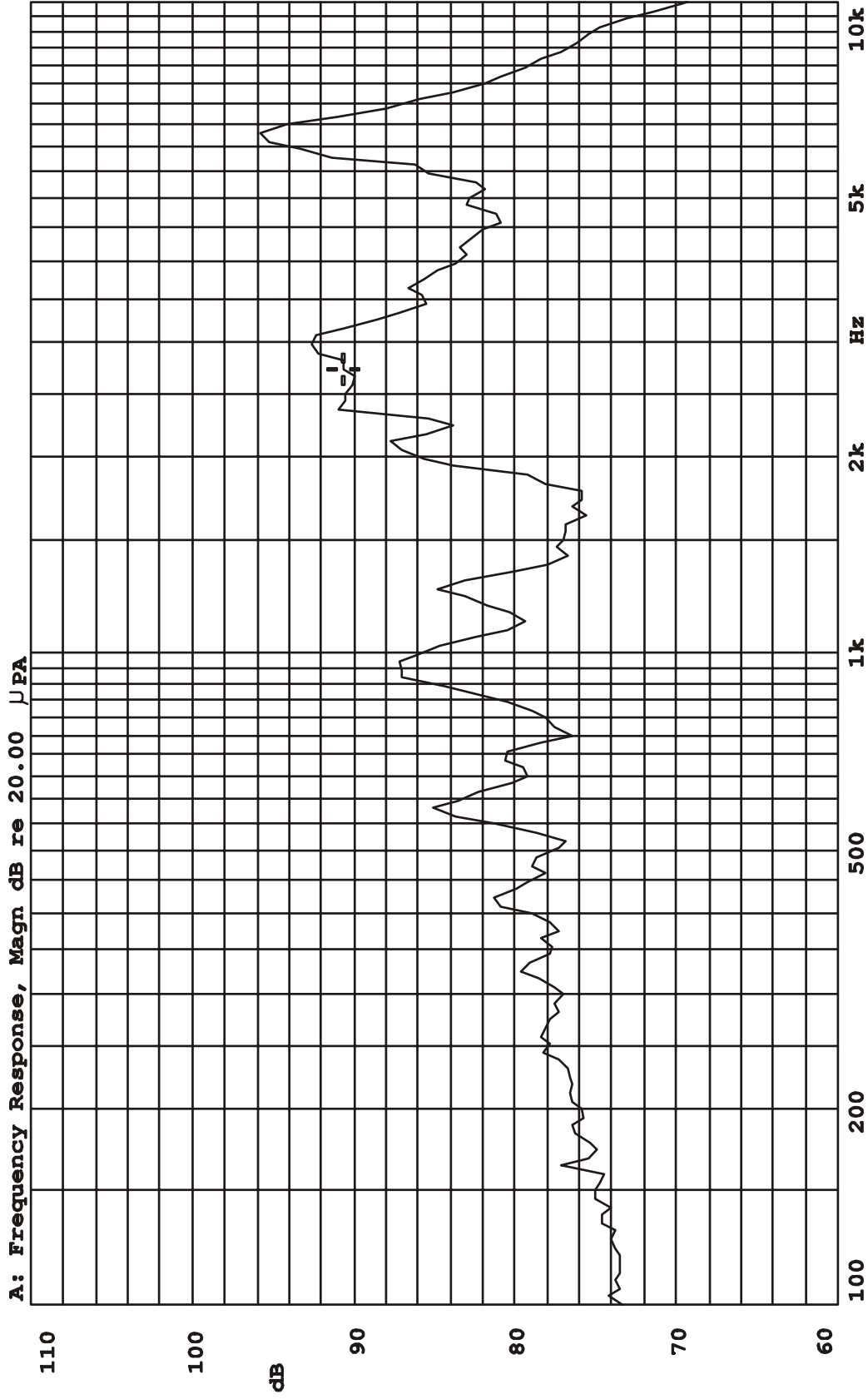


# SOLDERING PROFILE



1. TERMINAL SOLDERING TEMPERATURE  
MAX :235 C
2. SOLDERING TIME  
MAX:2.5SEC
3. TR REFLOW OVEN TEMPERATURE PROFILE

X:2.7384kHz Y:90.70dB ZA:Live Curve SSR T. RMS



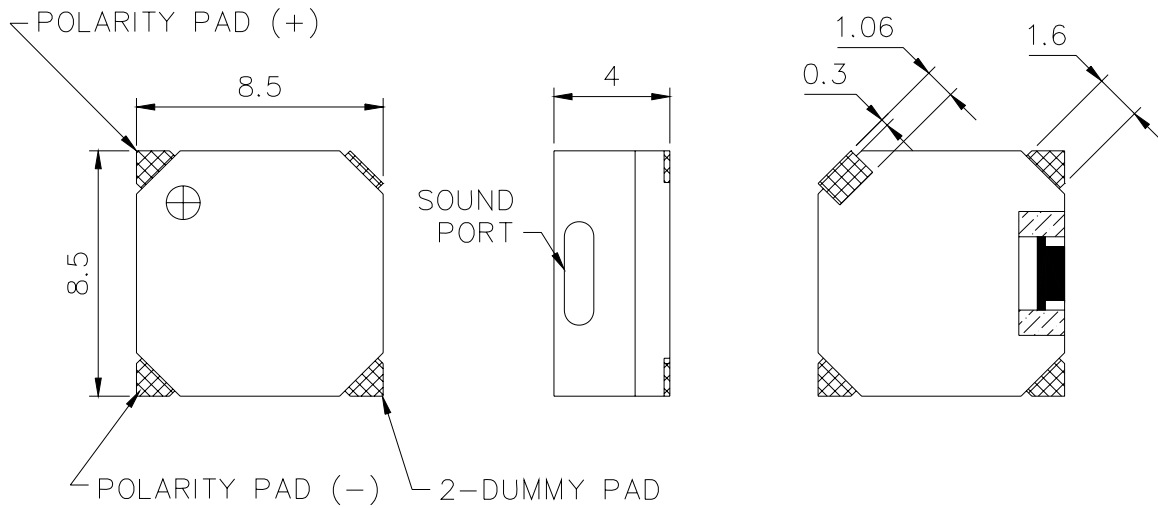
Mode: SSR

REV NO.

REVISION NOTE

APPROVAL

DATE

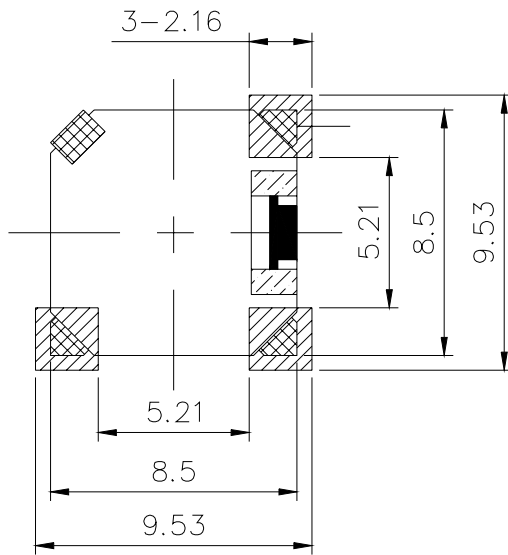


TITLE: SOUND TRANSDUCER (SMD)		DRAWN: <i>Killy</i> 2004/08/07	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-8501-CX4	1 REV	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTE-1175		CHECKED:	TOLERANCE ± 0.2	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: LCP		



ADVANCED ACOUSTIC TECHNOLOGY CORPORATION

REV NO.	REVISION NOTE	APPROVAL	DATE
---------	---------------	----------	------



TITLE: RECOMMENDED LAND PATTERN DIMENSIONS	DRAWN: <i>Killy</i> 2004/08/07	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-8501-CX4	1	DESIGNED: R&D OF AAT	UNITS: mm
DWG NO. DTE-1175		CHECKED:	TOLERANCE ± ***
REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED:	ONE PLACE DECIMAL ± ***
	MATERIAL: LCP	TWO PLACE DECIMAL ± ***	THREE PLACE DECIMAL ± ***



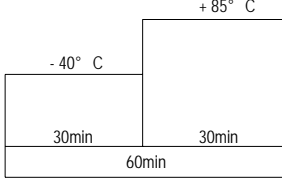
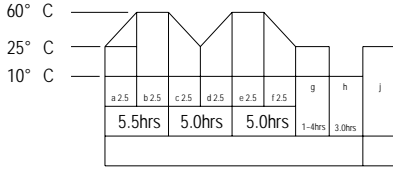
ADVANCED ACOUSTIC TECHNOLOGY CORPORATION

# ADVANCED ACOUSTIC TECHNOLOGY CORP.

## 荳翔科技股份有限公司

### RELIABILITY TEST

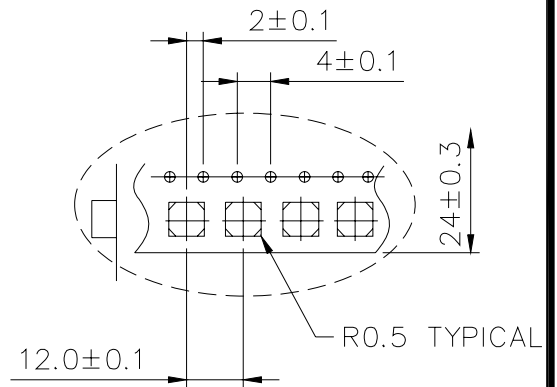
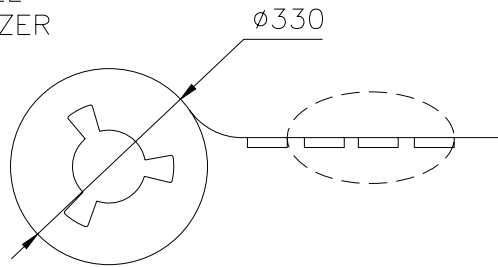
#### AD-8501-CX4

Item		Test conditions	Evaluation standard
1	High temp storage life	The part shall be capable of withstanding the storage temperature of +95°C for 240 hours.	<p>After the test, the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall be 67dB or more</p>
2	Low temp storage life	The part shall be capable of withstanding the storage temperature of -50°C for 240 hours.	
3	Temp. cycle	<p>The part shall be subjected to 5 cycles one cycle shall consist of</p> 	
4	Temp./ Humidity cycle	<p>The part shall be subjected to 10cycle One cycle shall be 24 hours and consist of</p>  <p>A,B,D,E,G,H,J:90~98%RH C,F :80~98%RH</p>	
5	Operating life	Driving the sounder at 25±10°C for 240hrs. Input 3.0V <sub>0-P</sub> square wave 2000Hz	
6	High temp.	The part shall be subjected to 240 hours at +85°C with 3.0V <sub>0-P</sub> ,2000Hz applied.	
7	Low temp.	The part shall be subjected to 240 hours at -40°C with 3.0V <sub>0-P</sub> ,2000Hz applied.	
8	Vibration	10~55Hz 1.5mm 55~150Hz 5G 10~200~10Hz 15minutes X,Y,Z,3directions 2h/direction.	
9	Fixed drop	The part mounted on an exclusive fixture(115g) shall be dropped 5 times from a height of 152cm onto concrete in each of 6 different axes(total 6 times)	
10	Free drop	The part shall be dropped freely from a height of 100cm onto concrete 1 time in 6 axes.(total 6 time)	
11	Solder ability	The part leads shall be immersed in molten solder maintained at 235±5°C for a period of 2.0±0.5 seconds	
12	Strength of Terminal	It shall be more than 10N in the vertical direction of terminal in the state that 4 terminals are soldered on PCB	

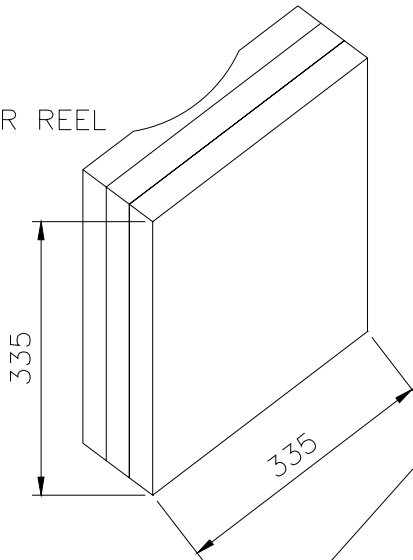


REV NO.	REVISION NOTE	APPROVAL	DATE
---------	---------------	----------	------

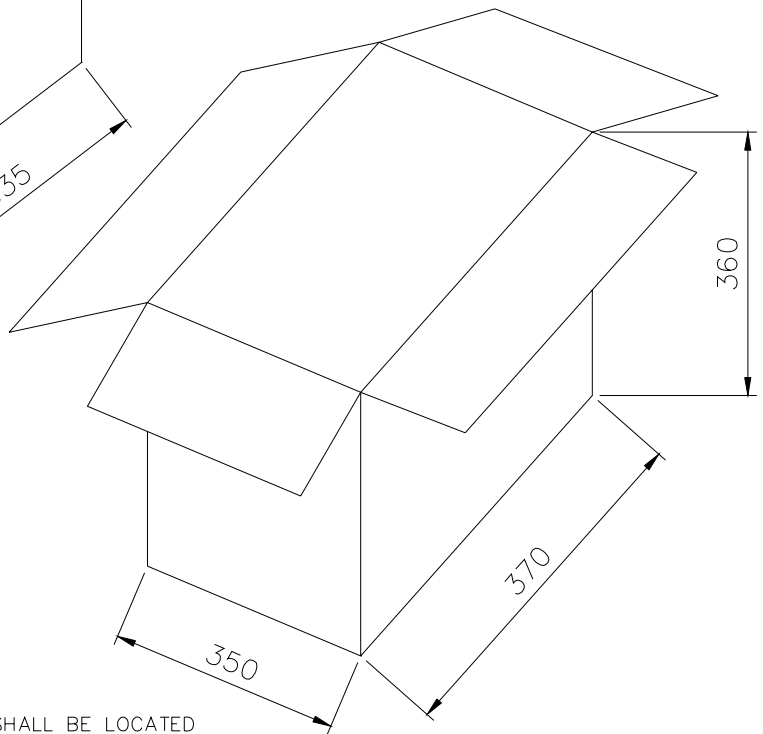
CARRIER REEL  
1K PCS BUZZER



INNER BOX  
1 ROLL CARRIER REEL



CARTON BOX  
10 INNER BOX  
10K PCS BUZZER



NOTE:

TAPE WIDTH: 24MM  
 TAPE PITCH: 12MM  
 TAPE POLARITY: COMPONENTS "+" TERMINAL SHALL BE LOCATED  
 CLOSEST TO THE ROUND SPROCKET HOLES AND ON THE TAPE'S  
 LEADING EDGE.(THE SOUND PORT IS ORIENTED OPPOSITE THE TAPE FEEDER  
 SPROCKET HOLES)  
 REEL DIAMETER: 330MM(13 INCHES)

TITLE: PACKING FORMATION		DRAWN: <i>Killy</i> 2004/08/07	SCALE: NONE	SHEET: 1 OF 1
PART NO. AD-8501-CX4		DESIGNED: R&D OF AAT	UNITS: mm	TOLERANCE ± ****
DWG NO. DTE-1175		CHECKED:	UNLESS OTHERWISE SPECIFIED:	
		APPROVAL:	ONE PLACE DECIMAL ± ***	
REV 1		MATERIAL: LCP	TWO PLACE DECIMAL ± ***	
			THREE PLACE DECIMAL ± ***	



ADVANCED ACOUSTIC TECHNOLOGY CORPORATION