

# MESSRS.

## SPECIFICATION FOR APPROVAL

### 承 認 書

Product	MAGNETIC BUZZER (SMD)
Part No.	AD-8504-CX4
Customer Approval	

Approved By	Checked By	Made By
		工程部 許俊程 2003-NOV-06



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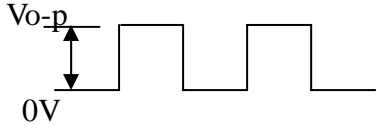
Fax: +86-519-511007

# AD-8504-CX4

## FEATURES

Compact : rich sound magnetic buzzer.

Applications : Mobile phone , PDA , pager etc.

Items		Units	Specifications	Conditions
01	Rated Voltage	Vo-p	3.6	
02	Operating Voltage	Vo-p	2.5~4.5	
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
04	Sound Pressure Label	dB (min)	87	
05	Resonant Frequency	Hz	2730±200	
06	Coil Resistance	Ω	16±3	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:

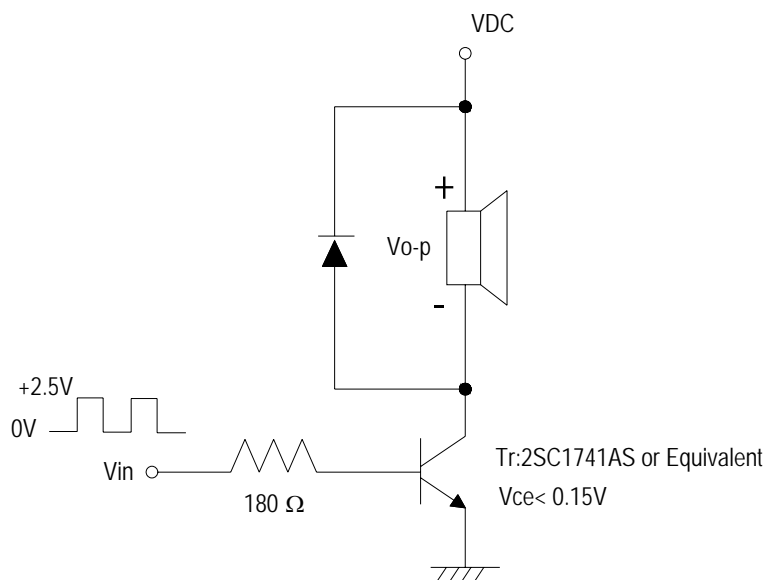
Ordinary Temp.(15~35°C), Humidity(25~85%RH), Air Pressure(860~1060HPa)

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

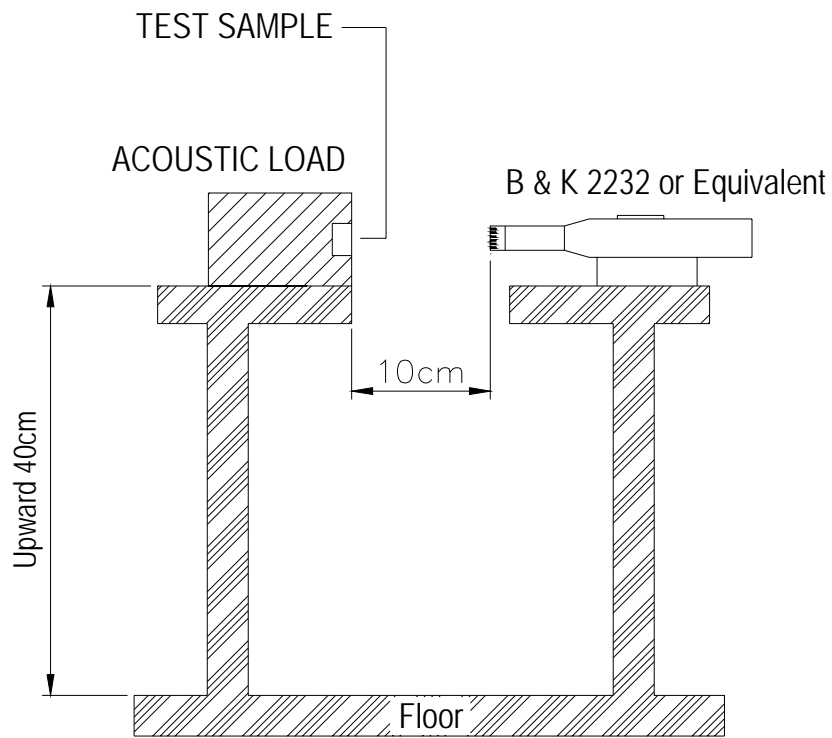
### Basic State:

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

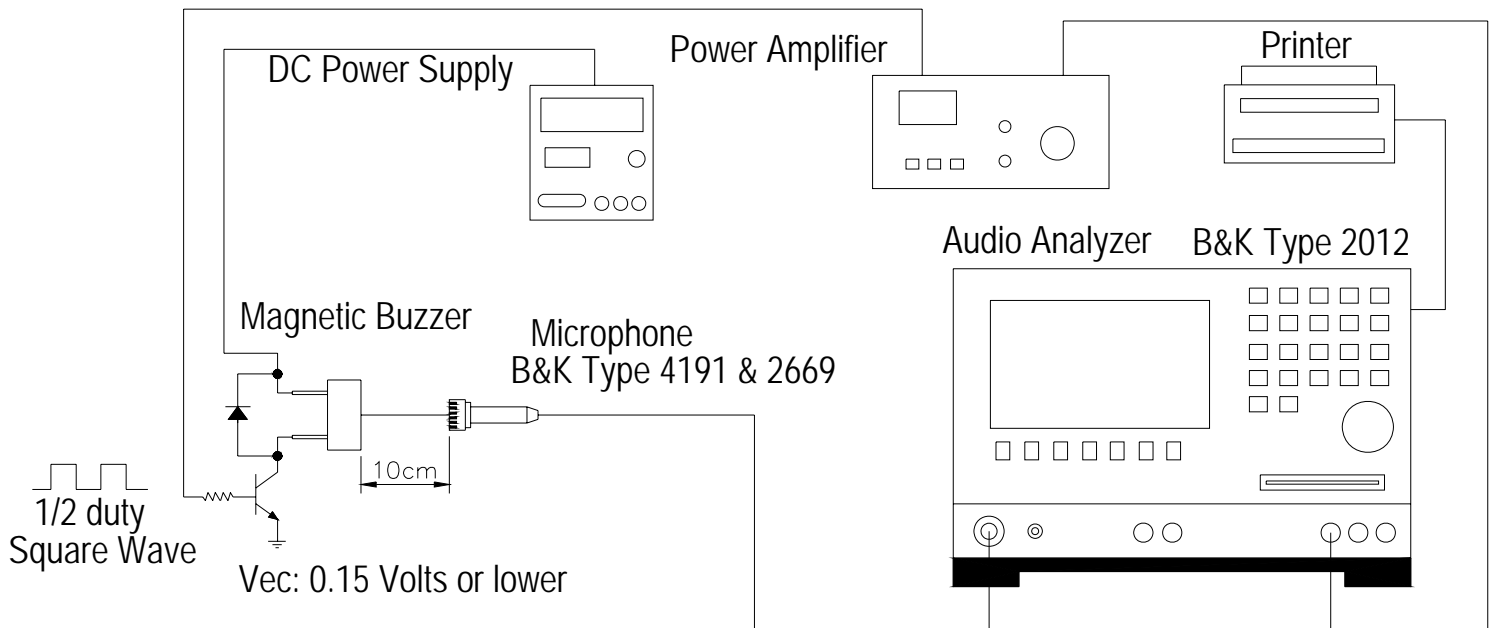
### Standard Drive Circuit:



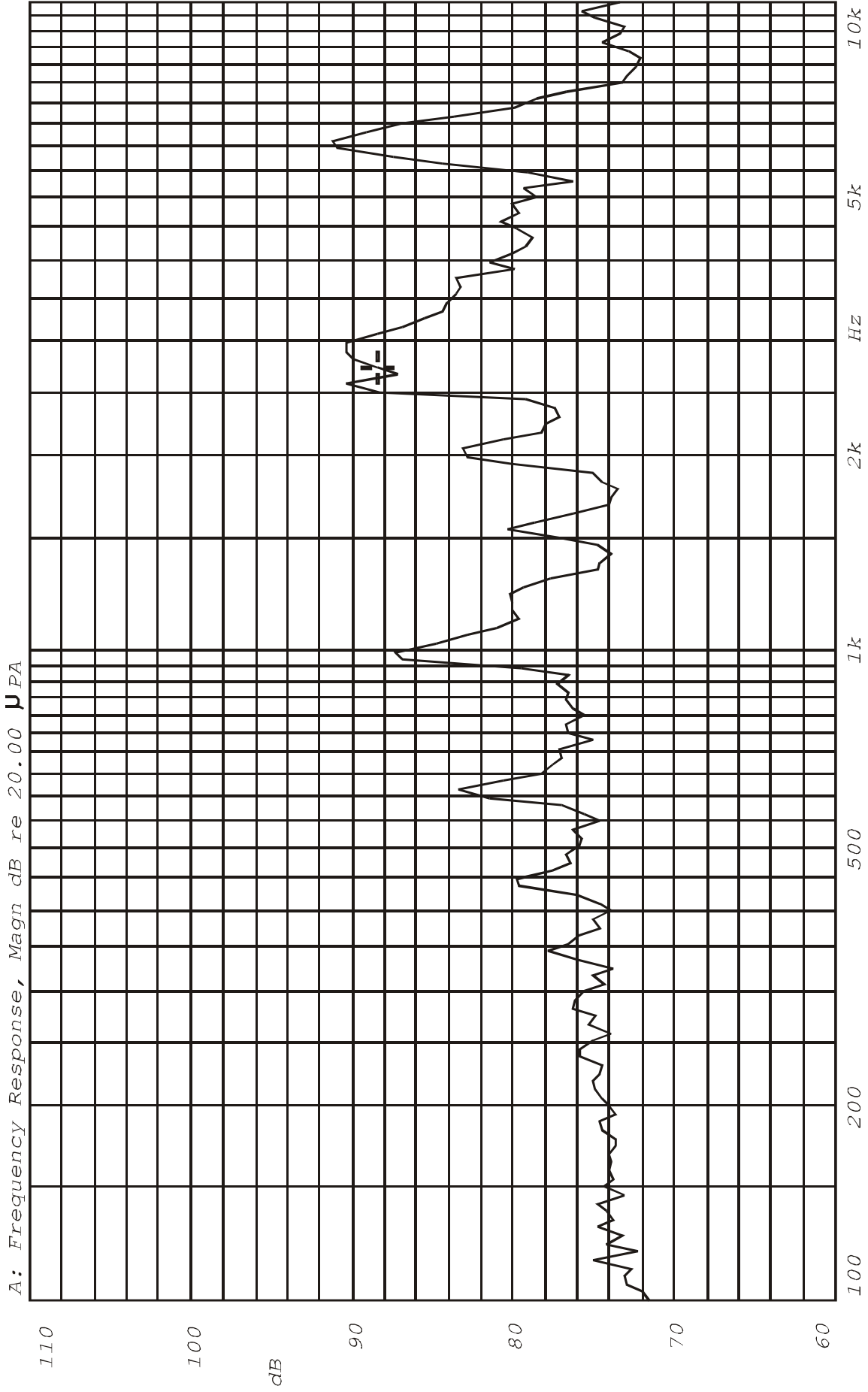
# STANDARD TEST FIXTURE



## Standard test condition of magnetic buzzer

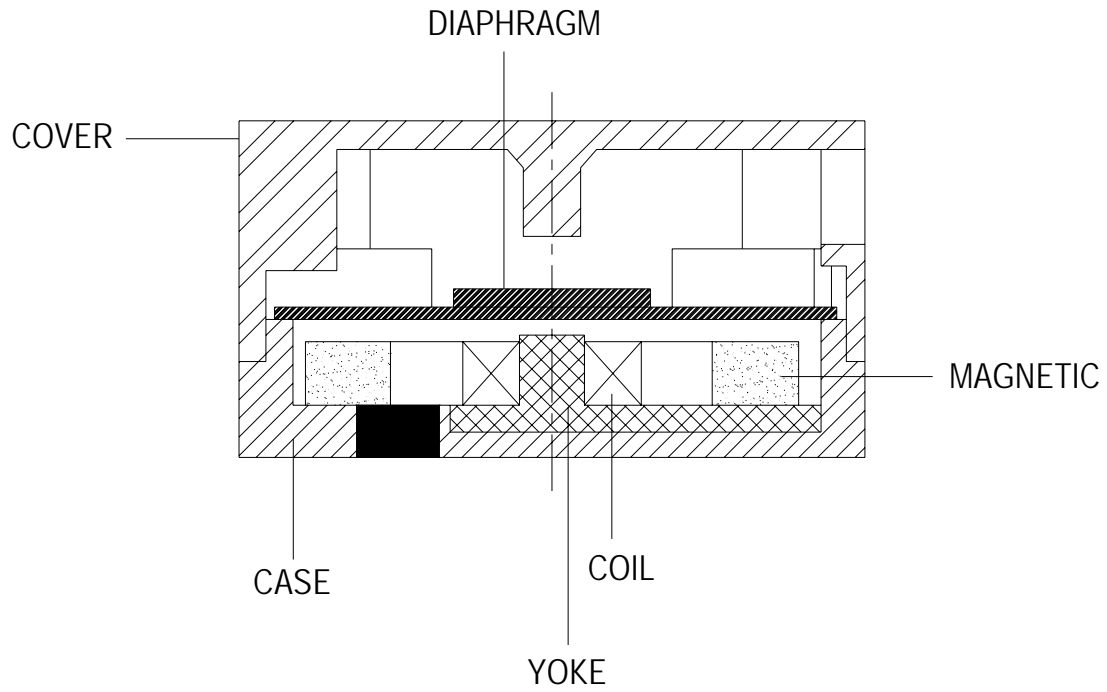


X:2.7384kHz Y:88.36dB ZA:Live Curve SSR T. RMS

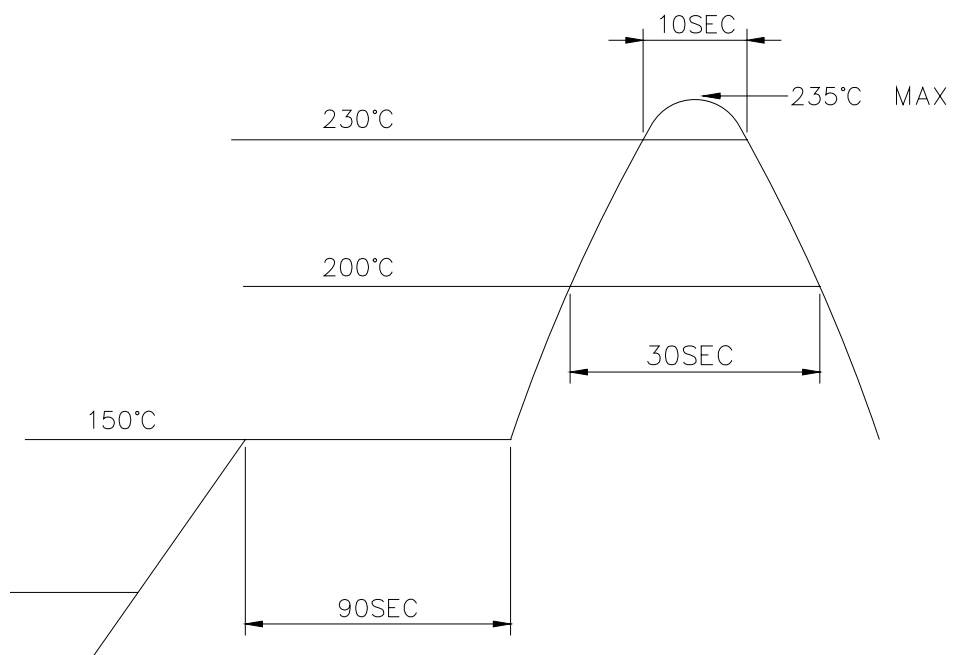


Mode: SSR

# STRUCTURAL SPECIFICATION

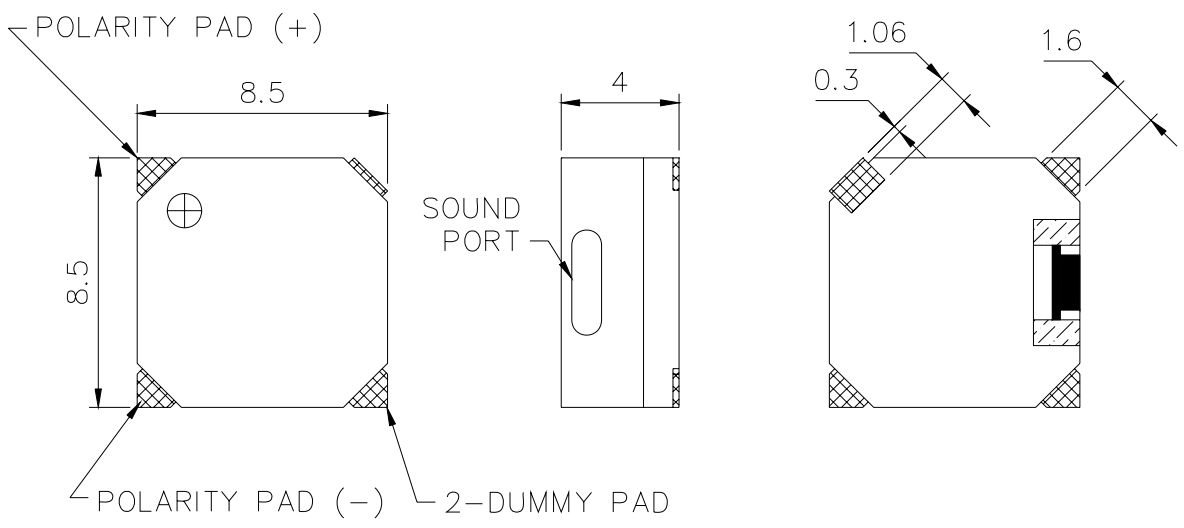


# SOLDERING PROFILE



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

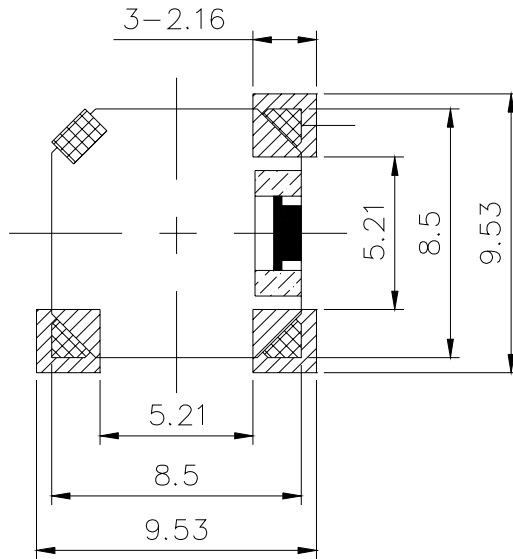
REV NO.	REVISION NOTE	APPROVAL	DATE
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TITLE: SOUND TRANSDUCER (SMD)		DRAWN: <i>Jack</i> 2003/04/11	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-8504-CX4	1 REV	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTE-1025		CHECKED:	TOLERANCE ± 0.2	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: LCP		



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TITLE: RECOMMENDED LAND PATTERN DIMENSIONS		DRAWN: Jack 2003/04/11	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-8504-CX4	1 REV	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTE-1025-1		CHECKED:	TOLERANCE ± ***	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: LCP		

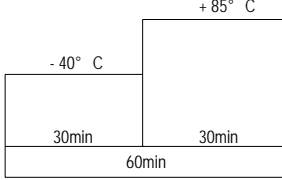
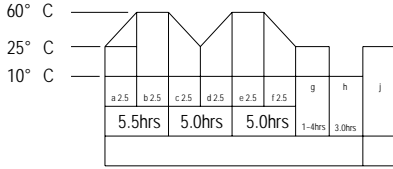


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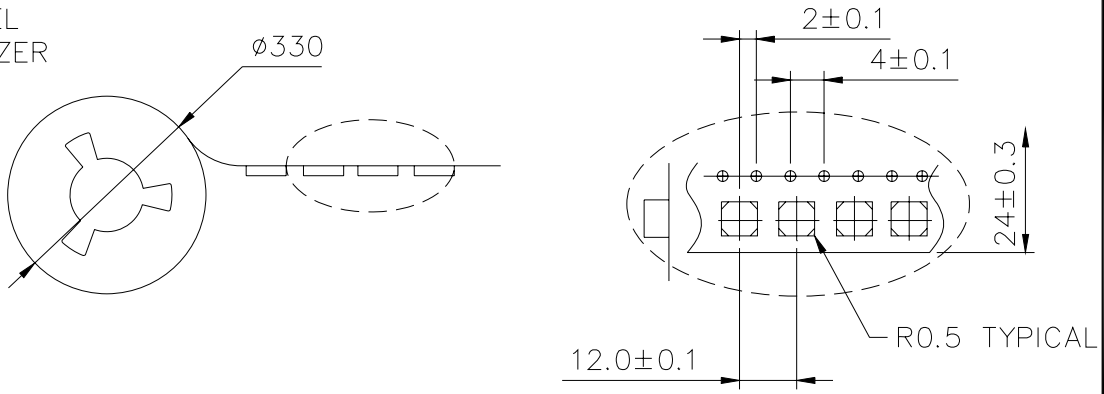
### RELIABILITY TEST

#### AD-8504-CX4

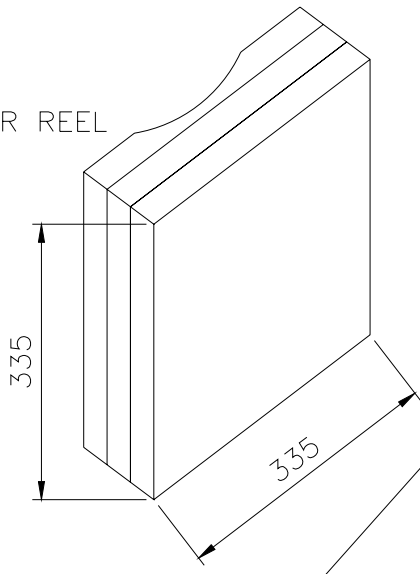
Item		Test conditions	Evaluation standard
1	High temp storage life	The part shall be capable of withstanding the storage temperature of +95°C for 240 hours.	<p>After the test, the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall be 79dB or more</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 3.6V <sub>0-P</sub> square wave 2730Hz	
6	High temp.	The part shall be subjected to 240 hours at +85°C with 3.6V <sub>0-P</sub> ,2730Hz applied.	
7	Low temp.	The part shall be subjected to 240 hours at -40°C with 3.6V <sub>0-P</sub> ,2730Hz 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	



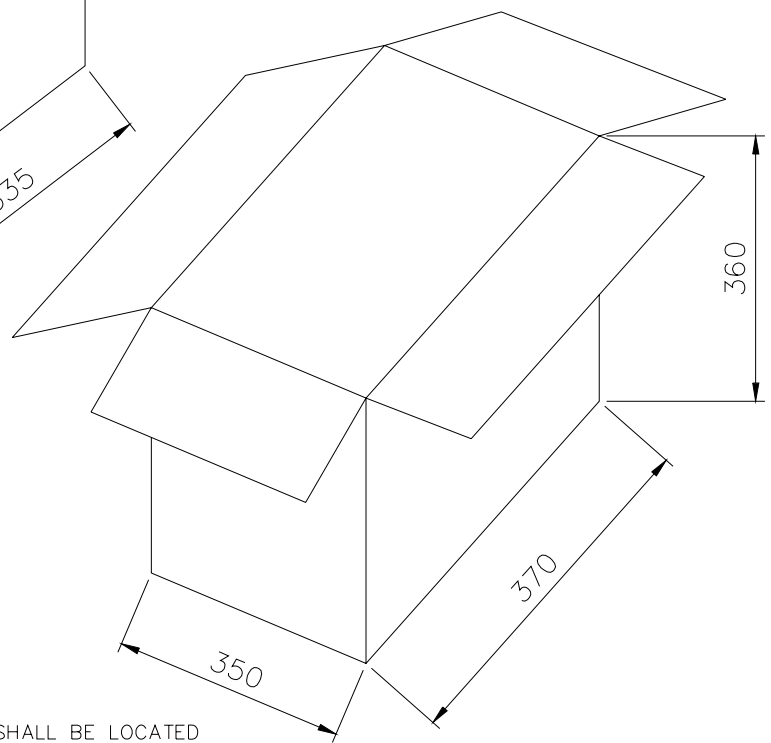
CARRIER REEL  
1K PCS BUZZER



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 THETAPE FEEDER SPROCKET HOLES)  
 REEL DIAMETER: 330MM(13 INCHES)

TITLE: <i>PACKING FORMAION</i>		DRAWN: <i>Jack</i> 2003/04/11	SCALE: NONE	SHEET: 1 OF 1
		DESIGNED: R&D OF AAT	UNITS: mm	
PART NO. <i>AD-8504-CX4</i>	1	CHECKED:	TOLERANCE ± ****	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
DWG NO. <i>DTE-1025-2</i>	REV	MATERIAL: LCP		



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