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# SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER (SMD)
Part No.	AD-7504BA-1
Customer Approval	

Approved By	Checked By	Made By



**A & B Components**

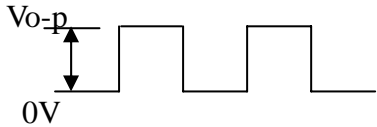
**<http://www.speaker-tw.com>**

# AD-7504-BA1

## 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	3 ~ 4.5	
03	Consumption Current	mA (max)	100	Standard State, Standard Drive Circuit. Rated Voltage, Distance at 10 cm free air 2700Hz, Square Wave 1 / 2 Duty
04	Sound Pressure Label	dB (min)	82	
05	Resonant Frequency	Hz	2700	
06	Coil Resistance	$\Omega$	$15 \pm 3$	At Basic State
07	Operating Temp.	$^{\circ}\text{C}$	-30 ~ +70	
08	Storage Temp.	$^{\circ}\text{C}$	-40 ~ +80	
09	Dimension	mm	7.5 x 7.5 x 2.6	See attached drawing.
10	Weight	Gram	0.4	

### Standard condition:

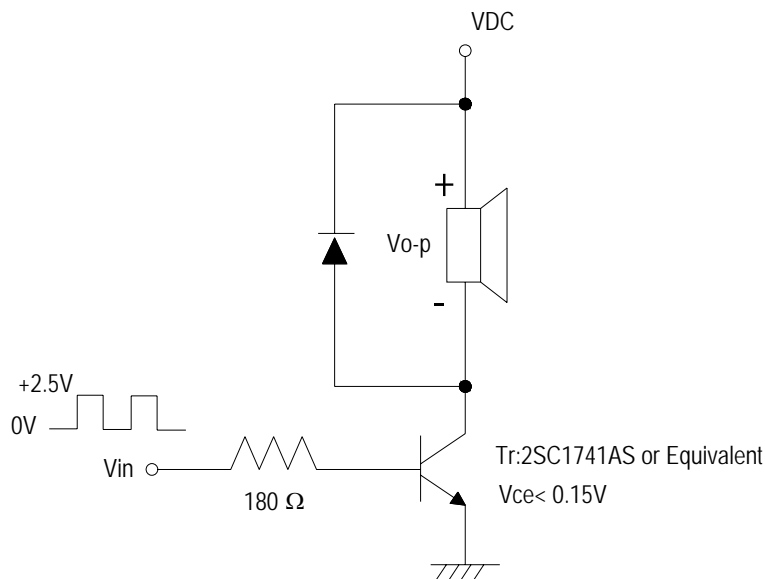
Ordinary Temp.(15~35 $^{\circ}\text{C}$ ), Humidity(25~85%RH), Air Pressure(860~1060HPa)

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

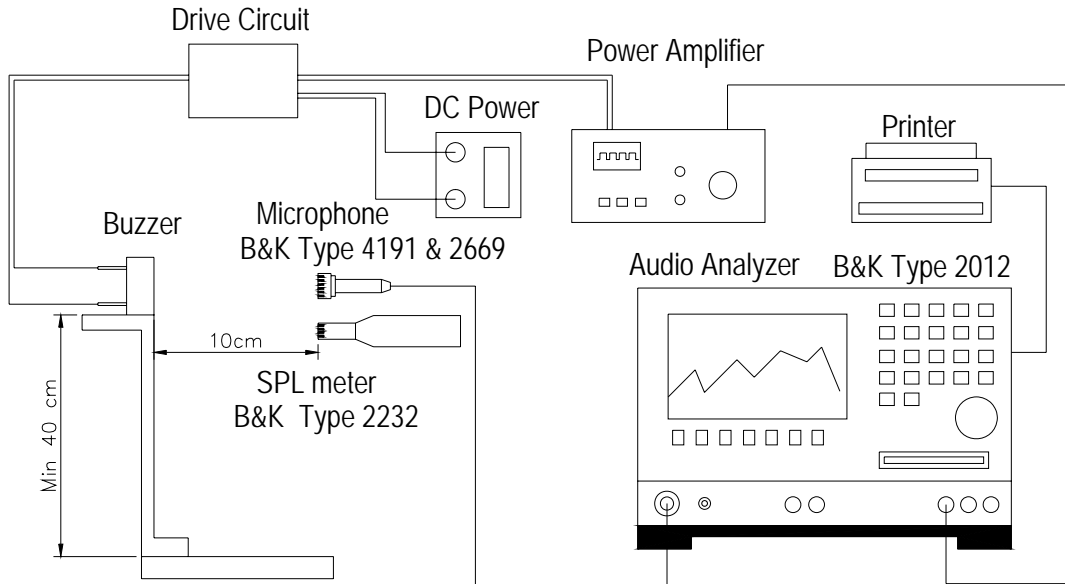
### Basic State:

Temp.(20 $\pm$ 2 $^{\circ}\text{C}$ ), Humidity(60~70%RH),Air Pressure(860~1060HPa).

### Standard Drive Circuit:

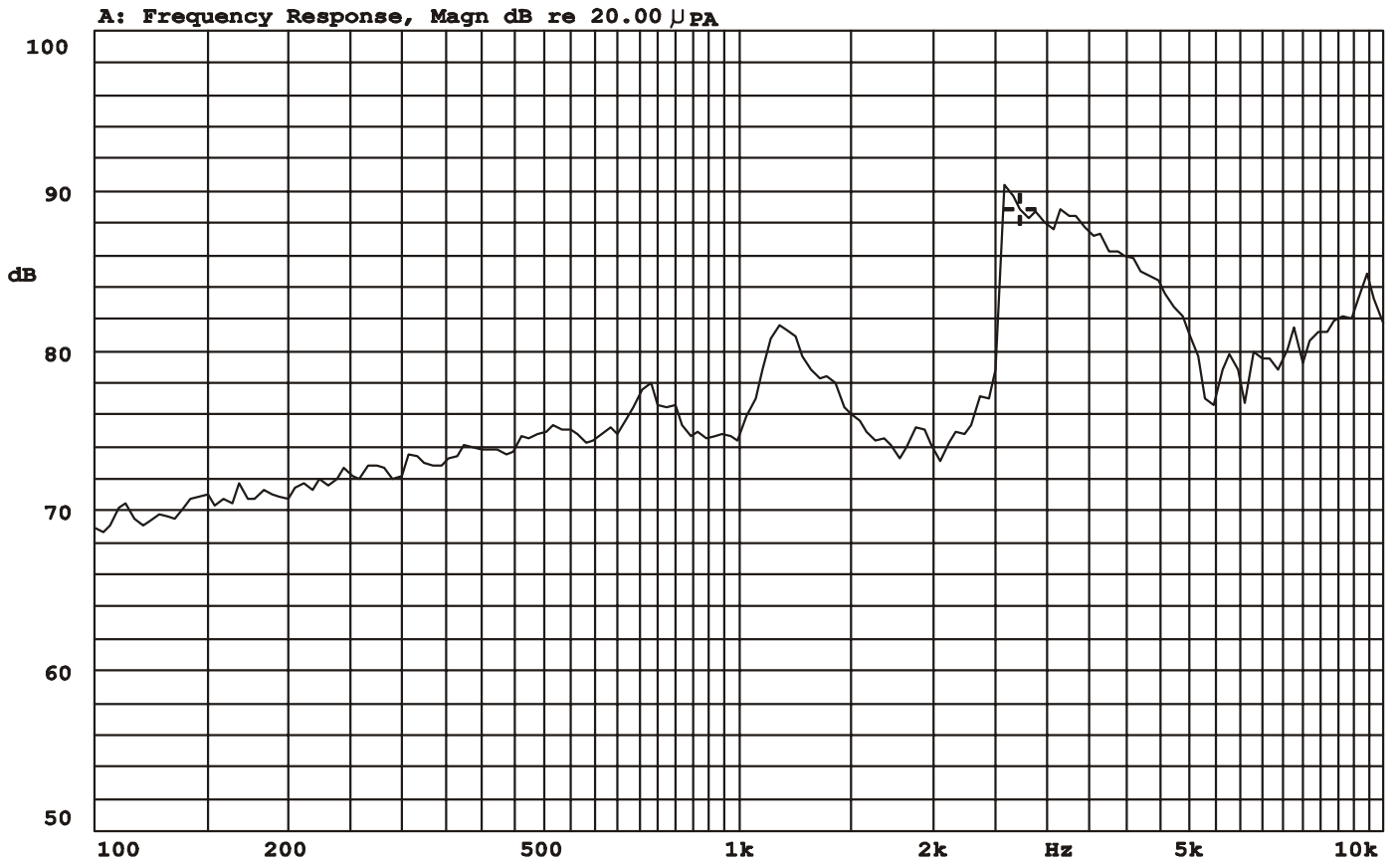


# Standard Test Fixture



# Frequency Response Curve

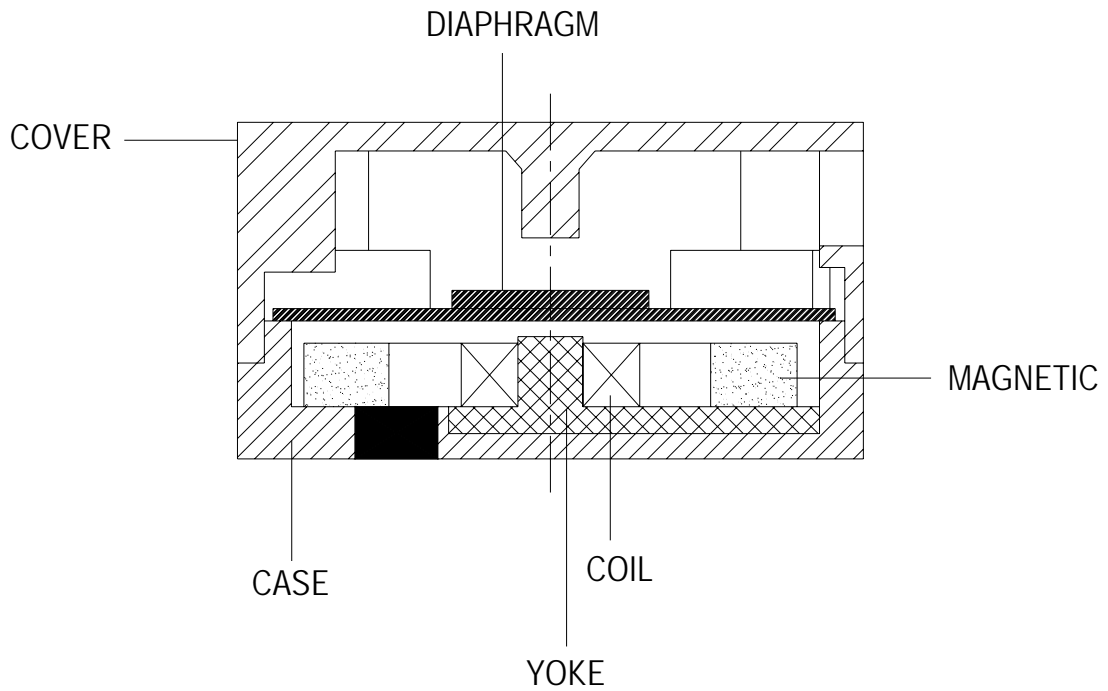
X:2.7384kHz Y:88.82dB ZA:Live Curve SSR T. RMS



Mode: SSR

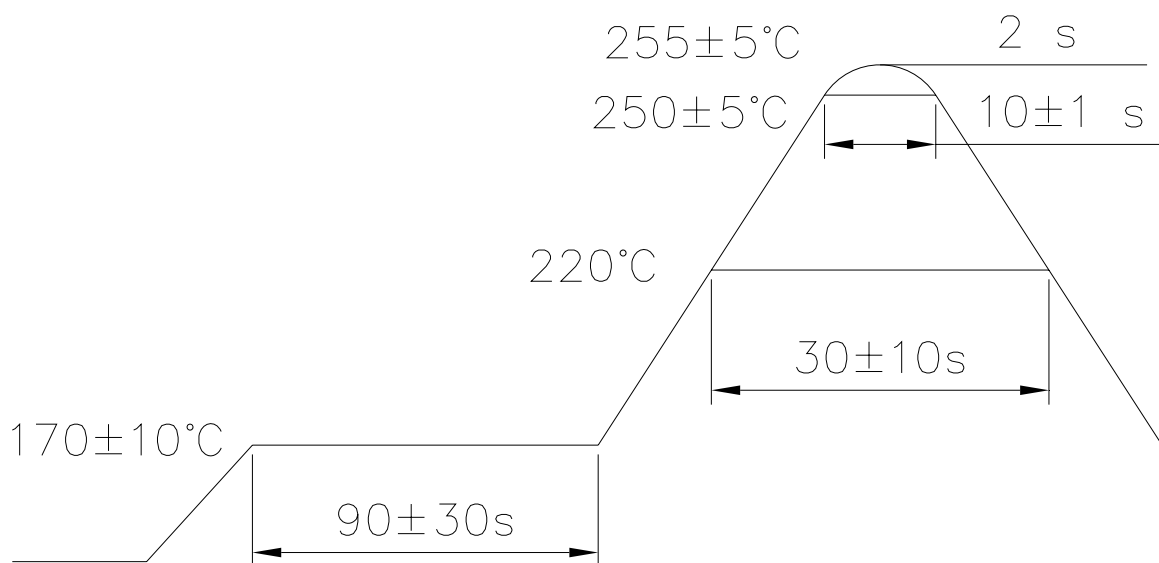


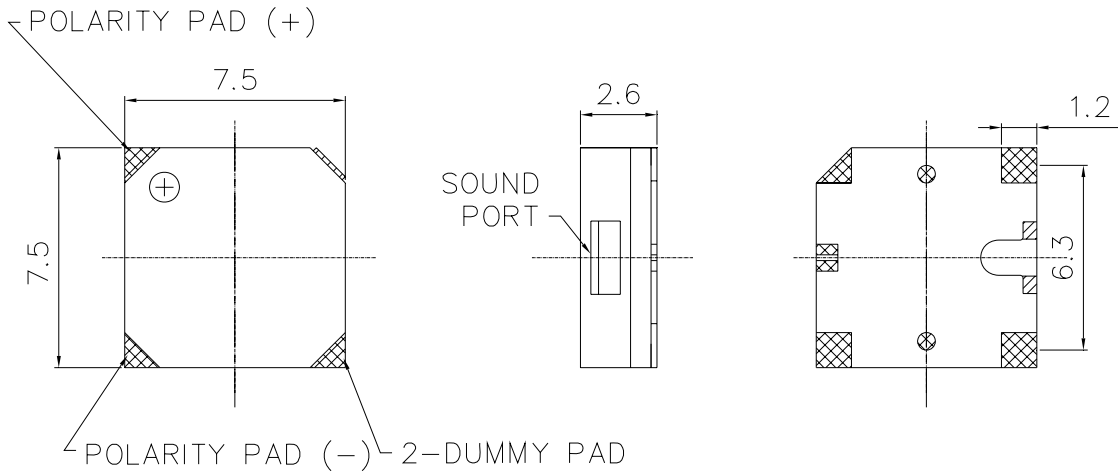
# STRUCTURAL SPECIFICATION



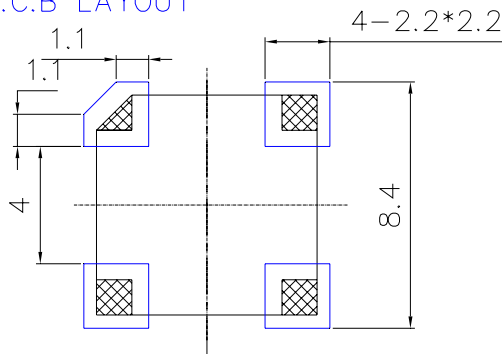
## SOLDER ABILITY

Temperature profile for reflowable Buzzer .





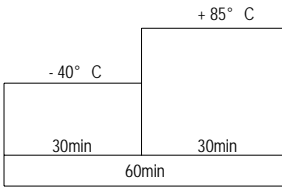
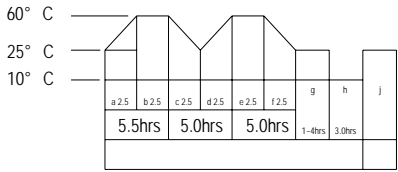
RECOMMENDED P.C.B LAYOUT



TITLE: SOUND TRANSDUCER (SMD)		DRAWN: Richard	2008/01/11	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-7504-BA1	1	DESIGNED: R&D DEP.		UNITS: mm	TOLERANCE ± 0.2
DWG NO. DTE-1223		CHECKED:		UNLESS OTHERWISE SPECIFIED:	
		APPROVAL:		ONE PLACE DECIMAL ± ***	TWO PLACE DECIMAL ± ***
	REV	MATERIAL: LCP			

A & B Components

# RELIABILITY TEST

Item		Test conditions	Evaluation standard
1	High temp storage life	The part shall be capable of withstanding the storage temperature of +80°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 77 or more</p>
2	Low temp storage life	The part shall be capable of withstanding the storage temperature of -40°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 Rated Voltage and Frequency.	
6	High temp.	The part shall be subjected to 240 hours at +85°C Input Rated Voltage and Frequency.	
7	Low temp.	The part shall be subjected to 240 hours at -40°C Input Rated Voltage and Frequency.	
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	