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# SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER
Part No.	AD-8504-EZ4
Customer Approval	

Approved By	Checked By	Made By



**A & B Components**

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

# AD-8504-EZ4

## ■ FEATURES

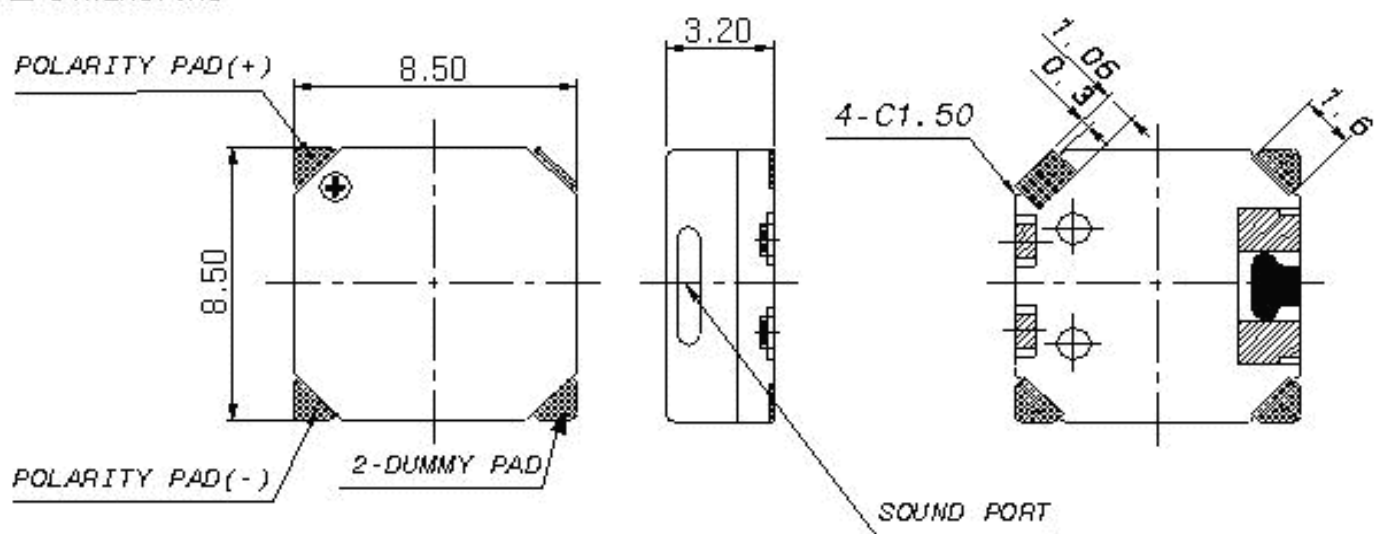
- Compact  
Small and slim size of 8.5mm $\Phi$  × 8.5mmL × 3.2mmH
- Low profile design
- For reflow process
- Side sound port
- Tape and reel packing

## ■ SPECIFICATIONS

TYPE	UNIT	AD-8504-EZ4
Rated voltage	V P-P	3.6
Operating voltage	V P-P	2.5~4.5
● Rated current	mA	Max 100
Coil resistance	$\Omega$	16 $\pm$ 3
● Sound output at 10cm	dBA	Min 85(Typ 91)
Resonant frequency	Hz	3100
Operating temperature	$^{\circ}$ C	-30 to +70
Storage temperature	$^{\circ}$ C	-40 to +85
Weight	g	0.5

- Value applying rated voltage(3100 Hz, 1/2 duty, square wave)

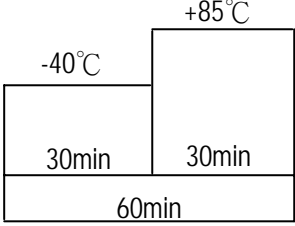
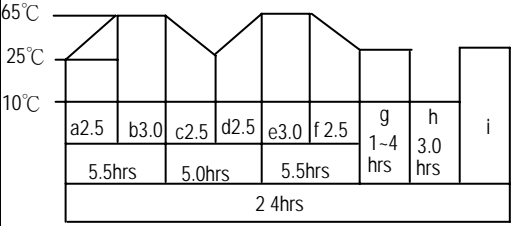
## ■ DIMENSIONS



unit : mm

# Electro - mechanical audio transducers

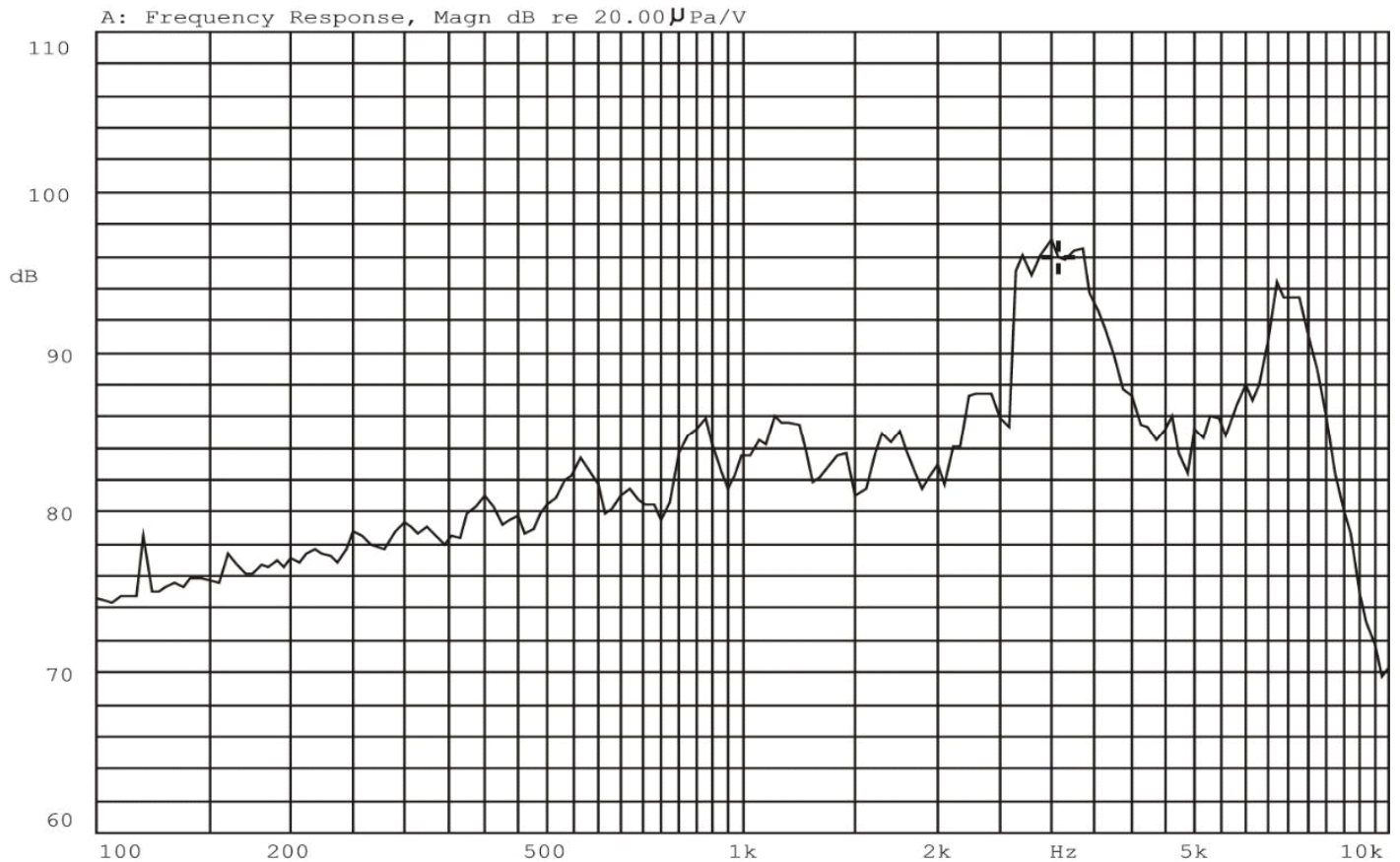
## ■ RELIABILITY

Item	Test conditions	Evaluation standard
1 High temp storage life	The part shall be capable of withstanding the storage temperature of +85°C for 240 hours.	After the test, the part shall meet specifications without any degradation in appearance and performance except SPL . SPL shall be 78dB or more.
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 10cycles One cycle shall be 24 hours and consist of</p>  <p>a,b,d,e,g,h,i : 90~98%RH c,f : 80~98%RH</p>	
5 Operating life	Driving the sounder at $25 \pm 10^\circ\text{C}$ for 240hrs input 3.6Vp-p Square wave 1/2duty 3100Hz.	
6 High temperature	The part shall be subjected to 240 hours at +70°C with 3.6V, 3100Hz applied.	
7 Low temperature	The part shall be subjected to 240 hours at -30°C with 3.6V, 3100Hz applied.	

# Electro - mechanical audio transducers

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 30 times)	
10	Free drop	The part shall be dropped freely from a height of 100cm onto concrete 1 time in 6 axes. (total 6 times)	
11	Solder ability	The part leads shall be immersed in molten solder maintained at $235\pm 5^{\circ}\text{C}$ for a period of $2.0\pm 0.5$ seconds.	ninety-five percent (95%) coverage with a continuous coating of bright new solder
12	Strength of Terminal	It shall be more than 10N toward A direction in the state that 4 terminals are soldered on PCB.	Same as the items of No.1 to No.10

X:3.0700kHz \*Y:95.90dB ZA:Live Curve SSR T. RMS

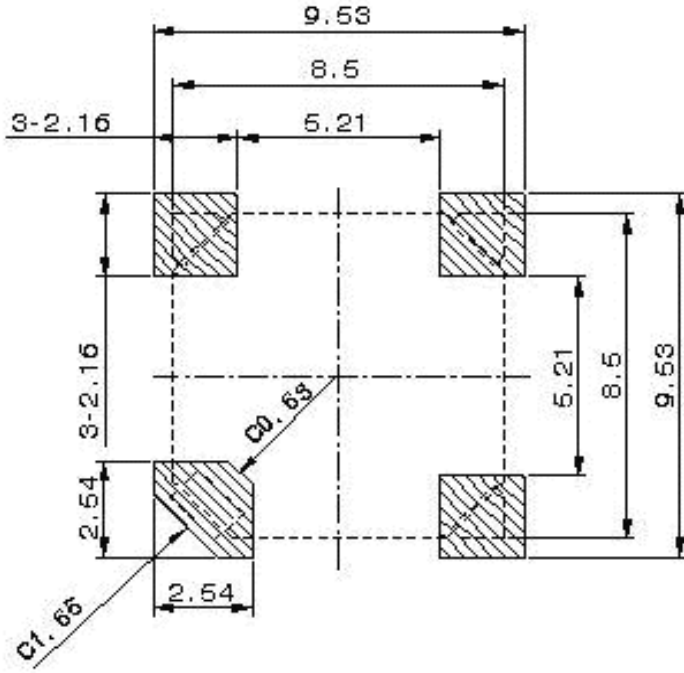


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Mode: SSR



Unit [mm]



RECOMMENDED LAND PATTERN DIMENSIONS

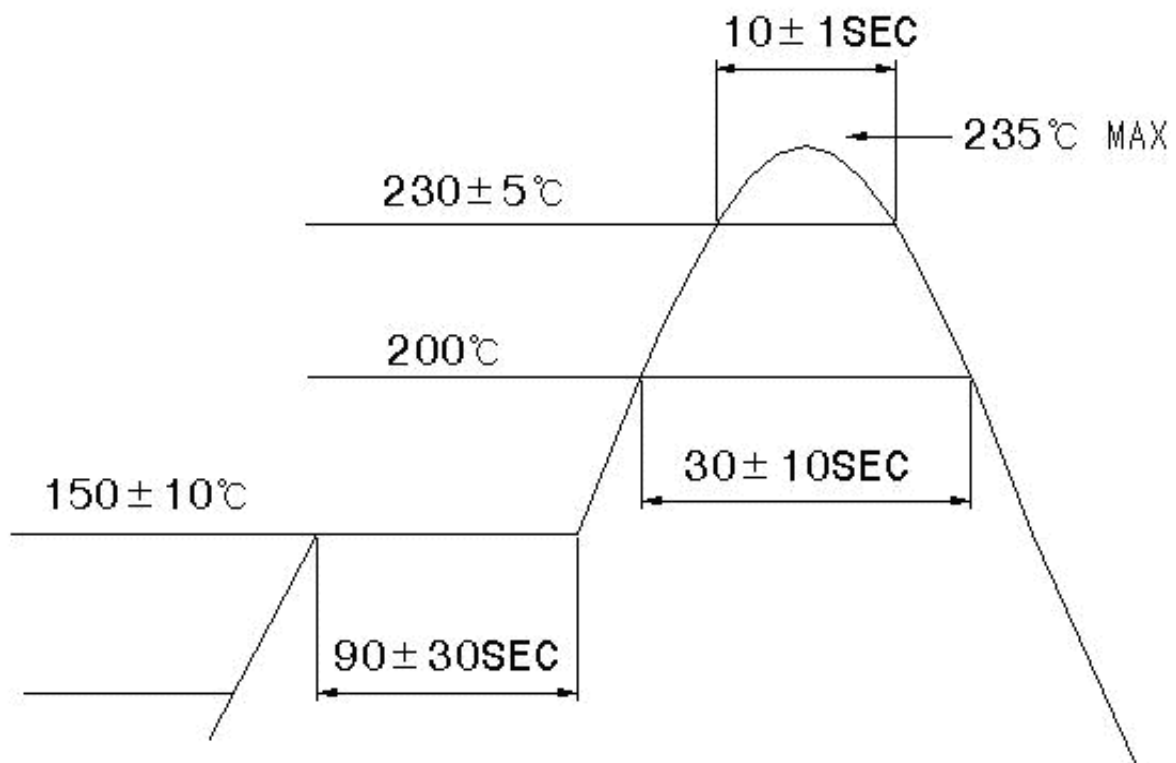
MODEL :AD-8504-CZ4  
AD-8504-CX4

## ◎ SOLDERING PROFILE

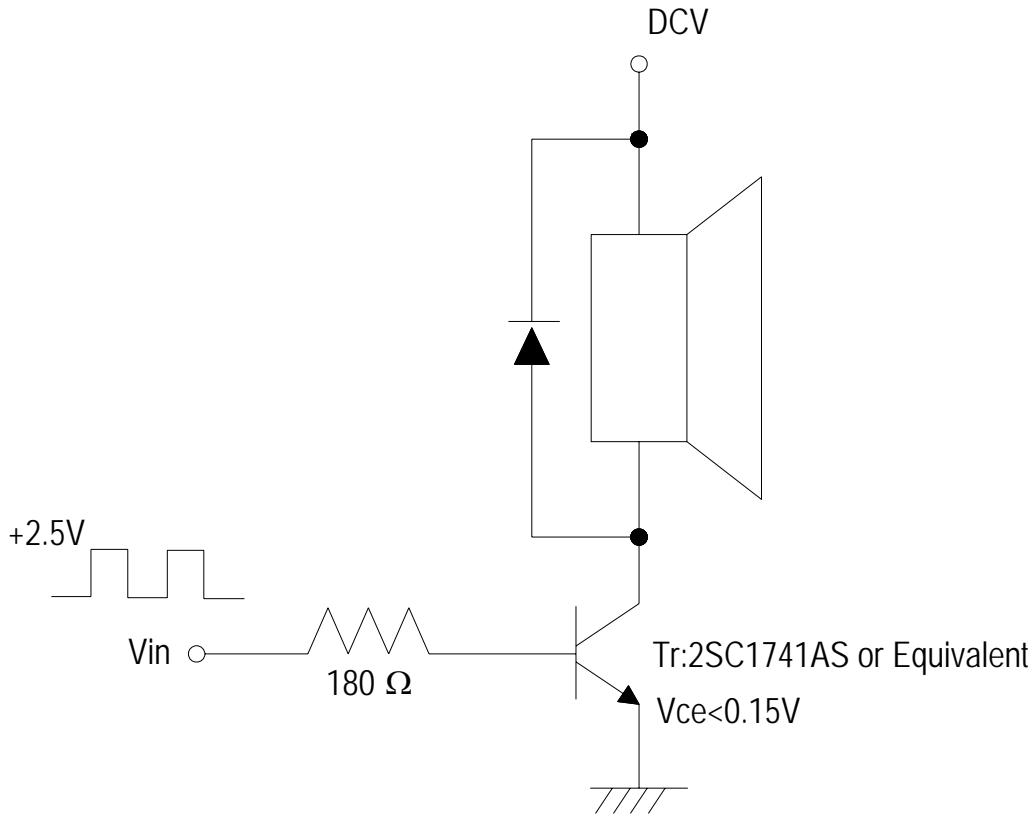
1. TERMINAL SOLDERING TEMPERATURE  
:  $235 \pm 5^{\circ}\text{C}$

2. SOLDERING TIME  
:  $2 \pm 0.5\text{SEC}$

3. IR REFLOW OVEN TEMPERATURE PROFILE



## STANDARD DRIVE CIRCUIT



## STANDARD TEST FIXTURE

