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# SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER
Part No.	AV-9004-DX
Customer Approval	

Approved By	Checked By	Made By



**A & B Components**

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

# AV-9004-DX

## ■ FEATURES

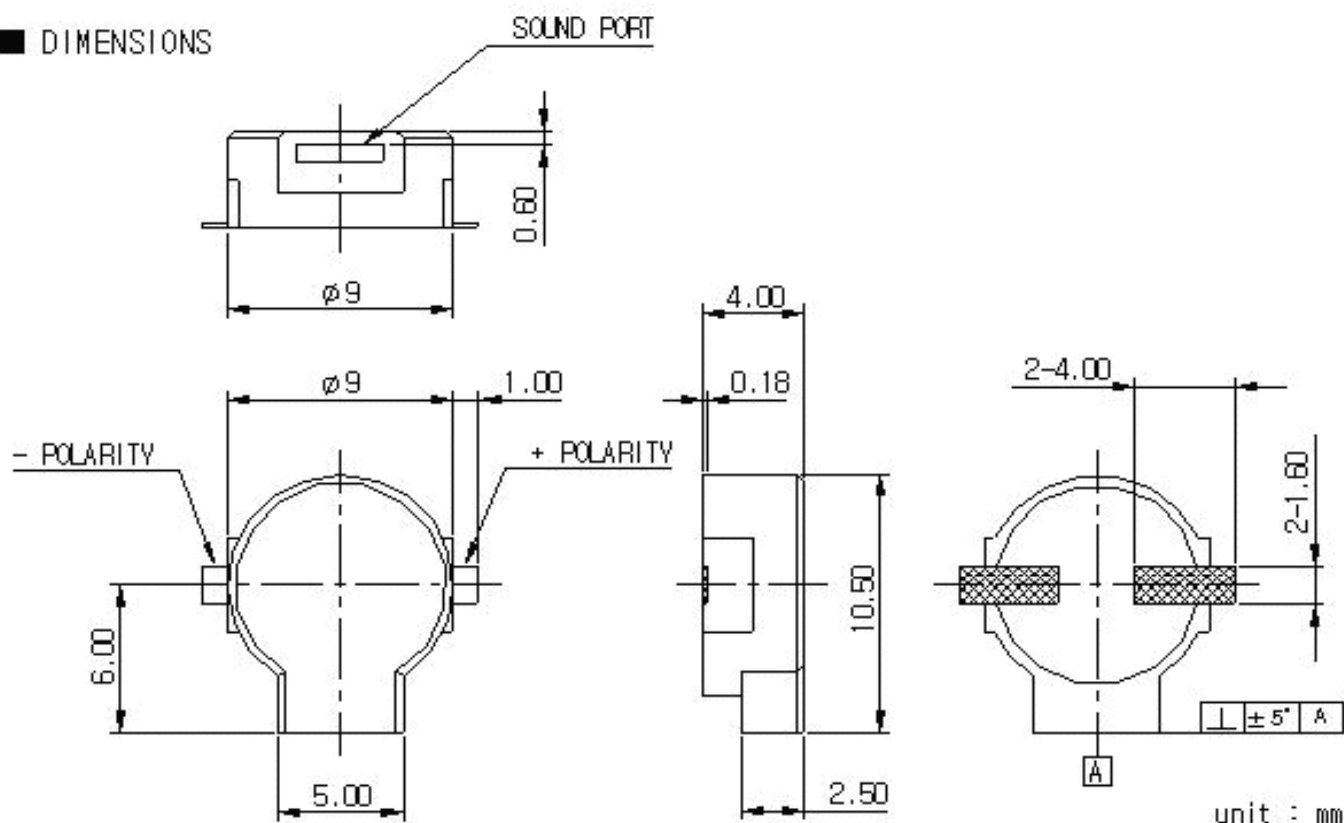
- Ultra Small ( $\phi 9 \times h4$ )
- For reflow process
- Side sound port
- Tape and reel packing

## ■ SPECIFICATIONS

TYPE	UNIT	AV-9004-DX
Rated voltage	V <sub>P-P</sub>	3.6
Operating voltage	V <sub>P-P</sub>	2.5~4.5
● Rated current	mA	Max 100
Coil resistance	$\Omega$	$16 \pm 3$
● Sound output at 10cm	dB <sub>A</sub>	Min 87(Typ 95)
Resonant frequency	Hz	<b>3000</b>
Operating temperature	--	-20 to +60
Storage temperature	--	-30 to +70
Weight	g	Max 0.7

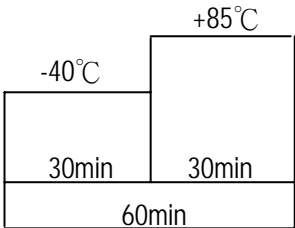
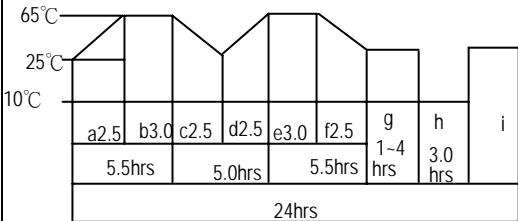
- Value applying rated voltage(3000Hz,1/2 duty, square wave)

## ■ DIMENSIONS



# Electro - mechanical audio transducers

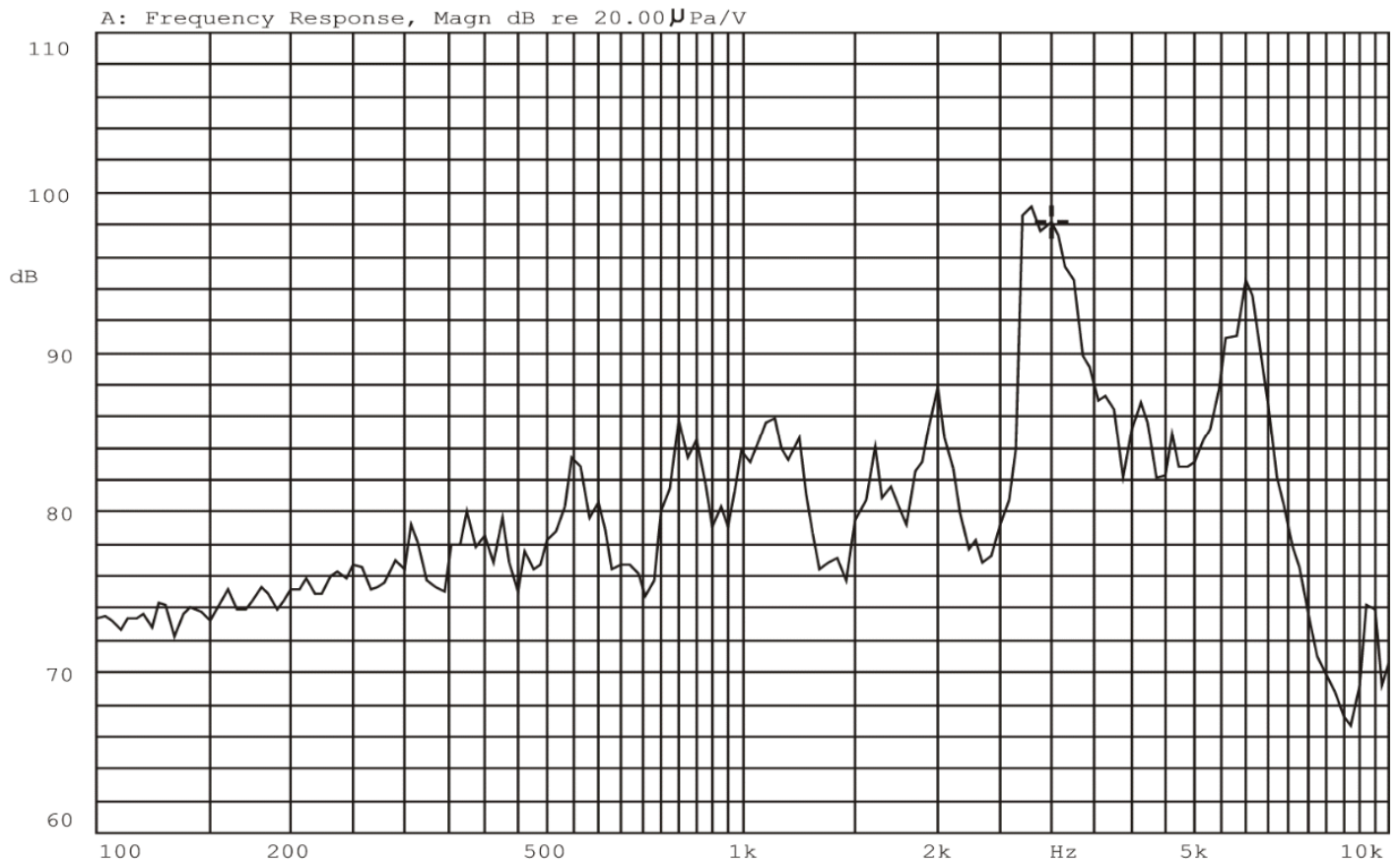
## ■ RELIABILITY

Item	Test conditions	Evaluation standard
1 High temp storage life	The part shall be capable of withstanding the storage temperature of +70°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 -30°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±10°C for 240hrs input 3.6Vp-p Squarewave 1/2duty 3000Hz.	
6 High temperature	The part shall be subjected to 240 hours at +60°C with 4.5V, 3000Hz applied.	
7 Low temperature	The part shall be subjected to 240 hours at -20°C with 2.5V, 3000Hz 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	Solderability	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 2 terminals are soldered on PCB.	Same as the items of No.1 to No.10

X:3.0000kHz \*Y:98.18dB ZA:Live Curve SSR T. RMS



21-OCT-2000 12:24:43

Mode: SSR



## © SOLDERING PROFILE

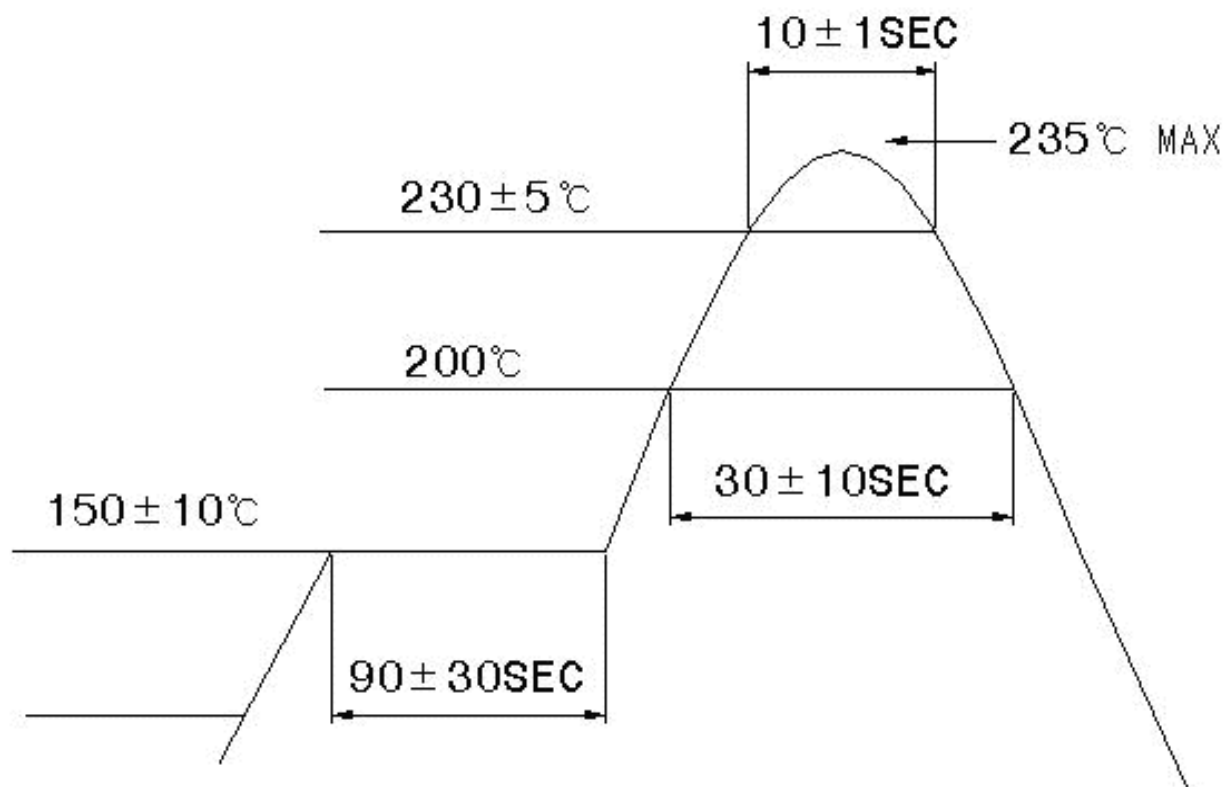
1. TERMINAL SOLDERING TEMPERATURE

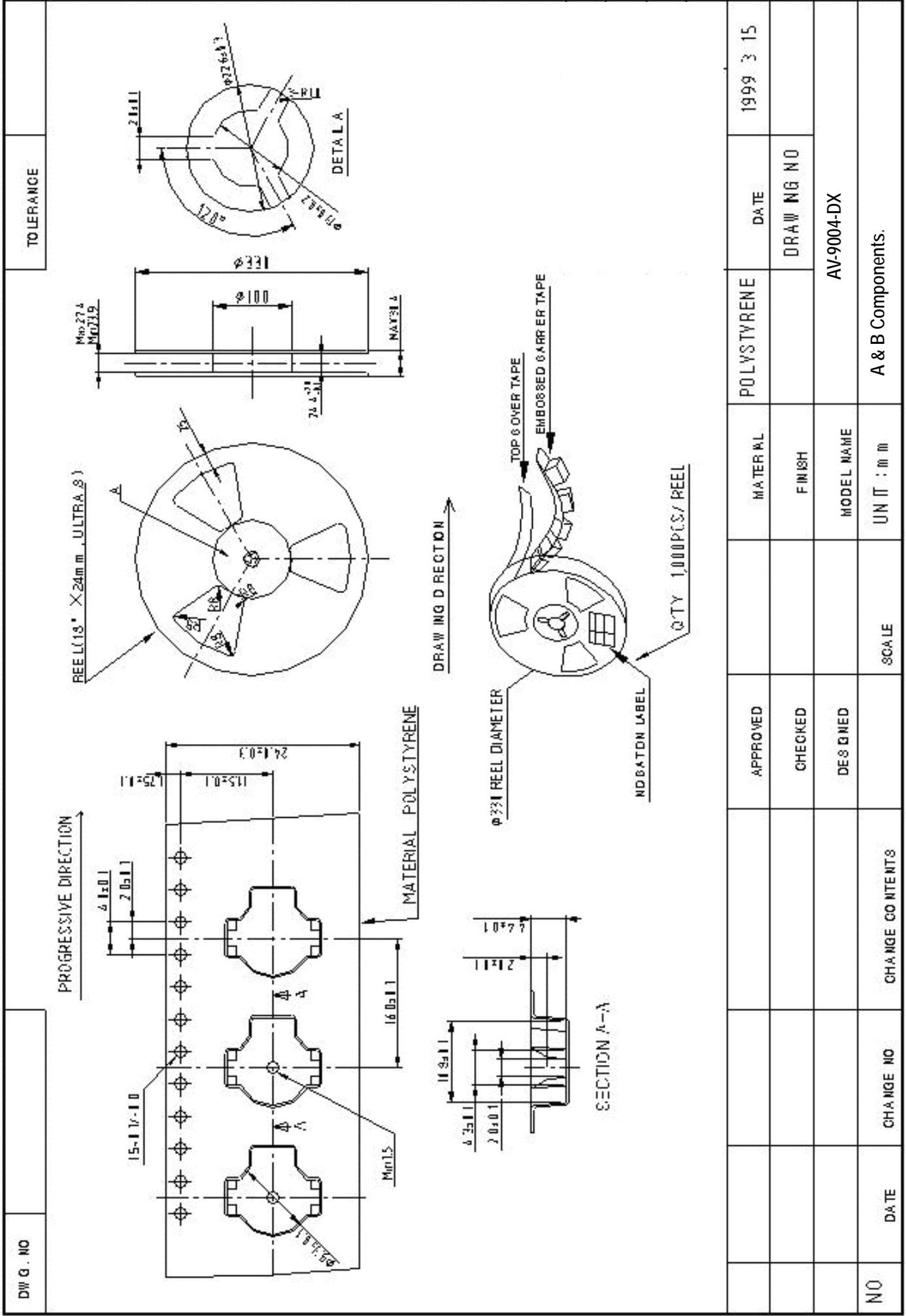
:  $235 \pm 5^\circ\text{C}$

2. SOLDERING TIME

:  $2 \pm 0.5\text{SEC}$

3. IR REFLOW OVEN TEMPERATURE PROFILE





DWG. NO

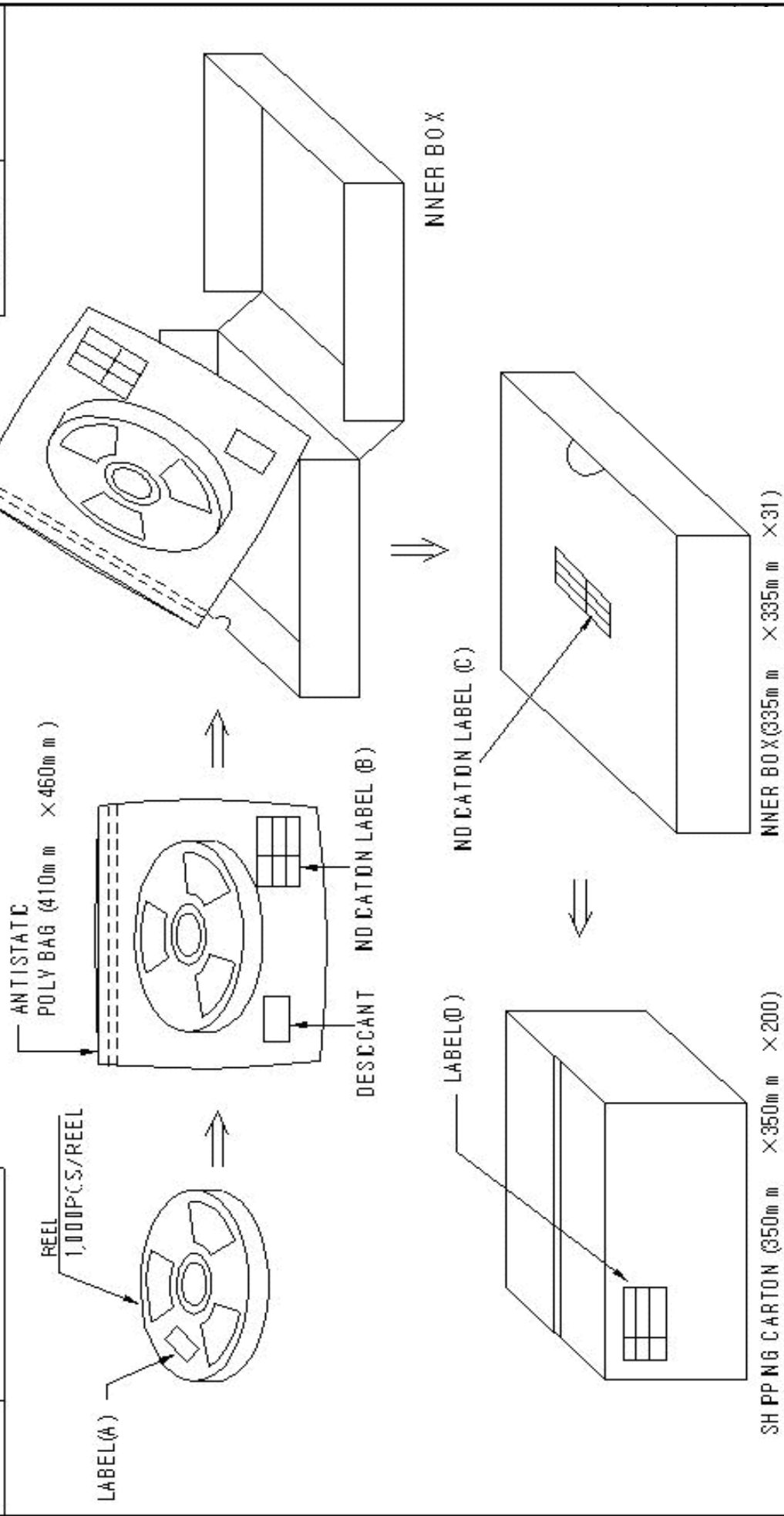
PROGRESSIVE DIRECTION

MATERIAL POLYSTYRENE

TOLERANCE

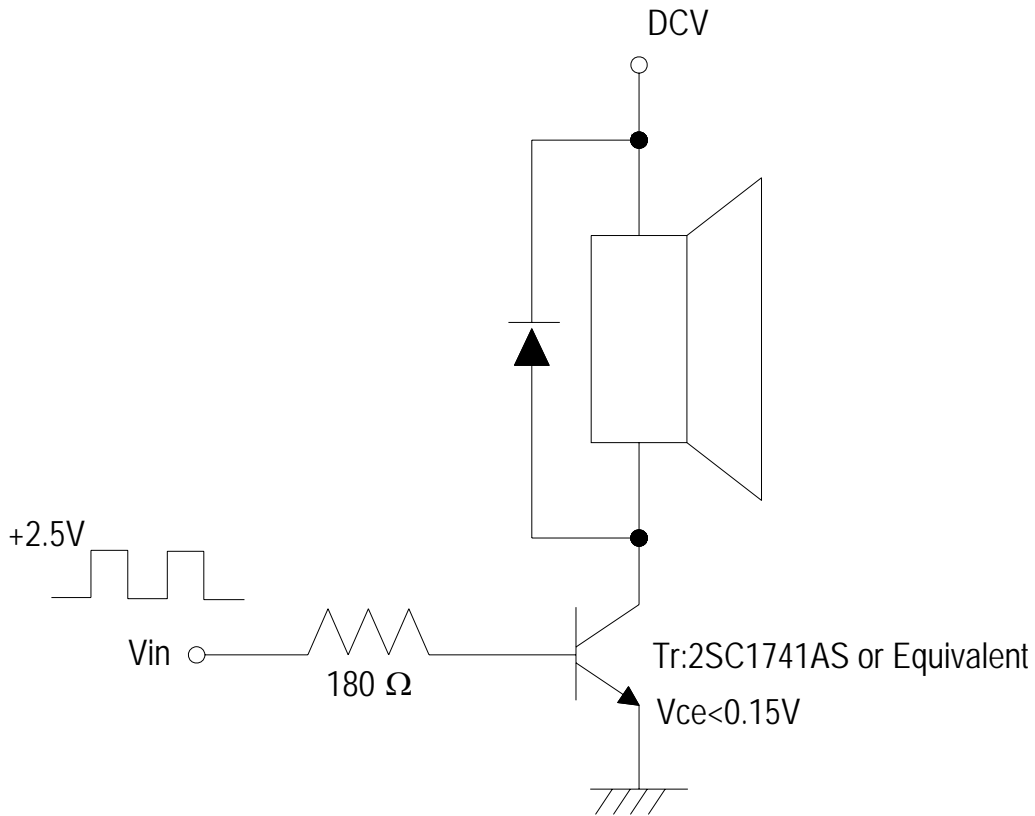
	APPROVED		POLYSTYRENE	DATE	1999 3 15
	CHECKED		FINISH	DRAWING NO	
	DESIGNED		MODEL NAME	AV/9004-DX	
			UNIT : m m	A & B Components.	
			SCALE		
			CHANGE CONTENTS		
			CHANGE NO		
			DATE		

DWG. NO. 일반공차  
TOLERANCE



NO	DATE	CHANGE NO	CHANGE CONTENTS	APPROVED	MATERIAL	DATE
				CHECKED	FINISH	1999. 4. 20.
				DESIGNED	PART NAME	DRAWING NO
A & B Components				UNIT : m m	MODEL NAME	SMD PACKING

## STANDARD DRIVE CIRCUIT



## STANDARD TEST FIXTURE

