# SPECIFICATION FOR APPROVAL

Product	MAGNETIC BUZZER (SMD)
Part No.	AD-8504-CQ4
Customer	
Approval	

Approved By	Checked By	Made By



A & B Components

http://www.speaker-tw.com

#### 1.CHARACTER DATA

Items		Units	Specifications	Conditions			
01	Rated Voltage	Vo-p	3.6	Vo-p			
02	Operating Voltage	Vo-p	2.5~4.5	0V			
03	Consumption Current	mA	Mean 100				
US		(max)	Peak 300	Standard State, Standard Drive Circuit.			
04	Sound Output	dB	87	Rated Voltage, Rated Frequency, Distance			
04		(min)		at 10 cm free air, Square Wave 1 / 2 Duty			
05	Rated Frequency	Hz	2730				
06	Coil Resistance	Ω	16 ± 3	At Basic State			
07	Operating Temp.	$^{\circ}\!\mathbb{C}$	-30 ~ +75				
80	Storage Temp.	$^{\circ}\!\mathbb{C}$	-40 ~ +85				
09	Weight	Gram	0.6				

# 2.Test Condition STANDARD

Temperature : 15 ~  $35^{\circ}$ C

Relative humidity: 25% ~ 85%,

Atmospheric pressure: 860mbar to 1060mbar.

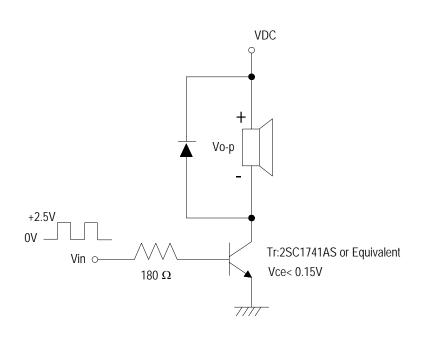
**JUDGEMENT** 

Temperature :  $20\pm3^{\circ}$ C

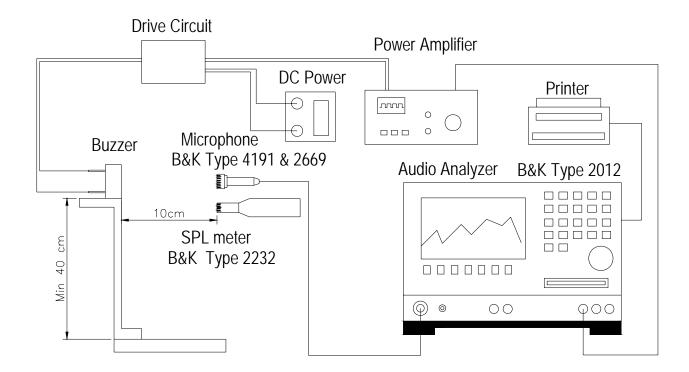
Relative humidity: 60% ~ 70%,

Atmospheric pressure: 860mbar to 1060mbar

#### **Standard Drive Circuit**

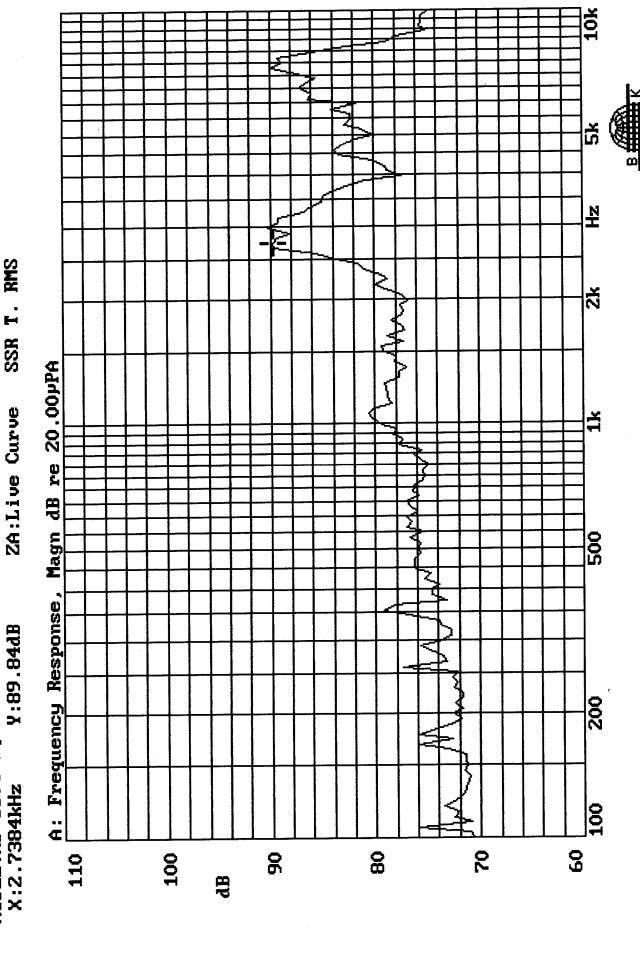


#### **Standard Test Fixture**

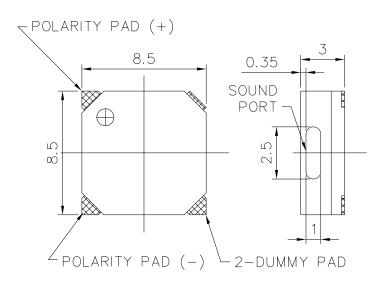


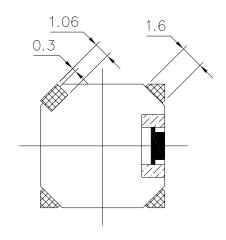
Frequency Response Curve

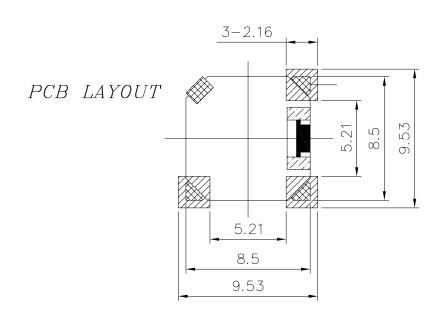
MODEL: AD-8504-CQ4



Mode: SSR







TITLE: SOUND TRANSDUCER (SMD)	ı	DRAWN:	Richard	SCALE: 4:1	SHEET: 1 OF 1		
		DESIGNED:	R&D DEP.				
$PART\ NO.\ AD-8504-CQ4$		CHECKED:	HECKED:		$TOLERANCE \pm 0.2$ $UNLESS OTHERWISE SPECIFIED:$		
DWG NO. DEED 4.4.4.0		APPROVAL:		ONE PLACE	$DECIMAL \pm ***$		
DTE-1119	REV	MATERIAL:	LCP		DECIMAL ± *** CE DECIMAL ± ***		

A & B Components

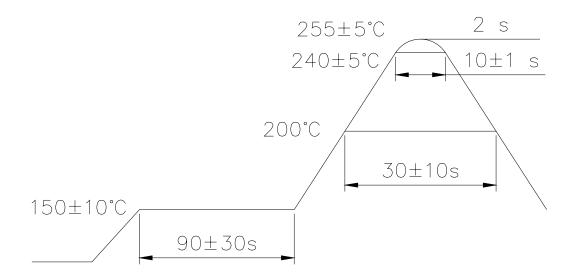
## **5.RELIABILITY TEST**

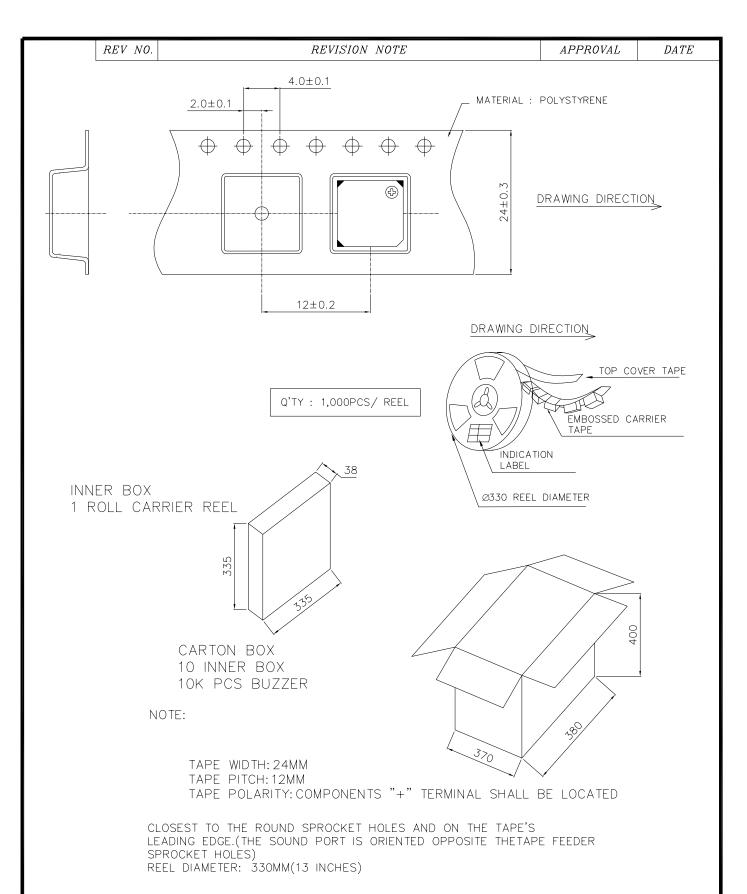
Item		Test conditions	Evaluation standard
01	High temp.Storage life	The part shall be capable of withstanding a storage Temperature of 85°C for 96 hours.	
02	Low temp.Storage life	The part shall be capable of withstanding a storage Temperature of -40°C for 96 hours.	
03	Temp. cycle	The part shall be subjected 10 cycles. One cycle shall consist of;  85°C  -40°C  30 min  30 min  60 min	After the test the part shall
04	Temp./Humidity cycle	The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of  90 ~ 95 % RH  55°C  0.5hr  6hrs  0.5hr  5hrs	meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 78dB or more.
05	Operating life	Rated Voltage, Frequency applied.  1. Ordinary temperature  The part shall be subjected to 1000 hours at room tremperature (25 ±10°C)  1. High temperature  The part shall be subjected to 500 hours at 75°C  2. Low temperature  The part shall be subjected to 500 hours at -30°C	
06	Vibration	The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm (9.3G). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.	
07	Fixed drop	The part shall be mounted on standard pc board and dropped from a height of 152cm onto a concrete floor 5 times in each 6 planes.(a total of 30 times)	

Item		Test conditions	Evaluation standard
08	Free drop	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times).	
10	Lead strength	Pull lead with a force of 10N,on the direction of the lead axis for 10:10±1 sec	

### **SOLDER ABILITY**

Temperature profile for reflowable Buzzer .





TITLE: PAC	CKING FORMAIO	V	DRAWN:	Richard	2007/10/19	SCALE: NONE	SHEET: 1	OF	1
		*	DESIGNED:	R&D	DEP.	011116.	mm		
PART NO. AD-	-8504-C04	1	CHECKED:			TOLERANCE UNLESS OTHE		dini	ED.
DWG NO.			APPROVAL:			ONE PLACE	$DECIMAL \pm$	***	ED:
DWG 140.	DTD-2004-2	REV	MATERIAL:	LCP	)	TWO PLACE THREE PLACE	DECIMAL ± CE DECIMAL		**

A & B Components