

MESSRS.

SPECIFICATION FOR APPROVAL

承 認 書

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

Approved By	Checked By	Made By
工程 部 王台平 JUN-21-2006	工程 部 劉民祥 JUN-21-2006	工程 部 許俊程 JUN-21-2006



ADVANCED ACOUSTIC TECHNOLOGY CORP.

苙 翔 科 技 股 份 有 限 公 司



ISO 9001 Certified

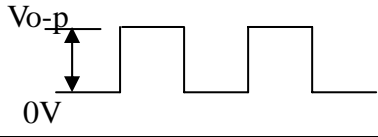
2F, No.207, Sec. 6, Chung Shan N. Rd., Taipei, Taiwan.

Tel: +886-2-88665255

Fax: +886-2-88665250

<http://www.aatc.com.tw>

1.CHARACTER DATA

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)	Mean 100	Standard State, Standard Drive Circuit. Rated Voltage, Rated Frequency, Distance at 10 cm free air, Square Wave 1 / 2 Duty
			Peak 300	
04	Sound Output	dB (min)	87	
05	Rated Frequency	Hz	2730	
06	Coil Resistance	Ω	16 ± 3	
07	Operating Temp.	$^{\circ}\text{C}$	-30 ~ +75	
08	Storage Temp.	$^{\circ}\text{C}$	-40 ~ +85	
09	Weight	Gram	0.6	

2.Test Condition

STANDARD

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

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

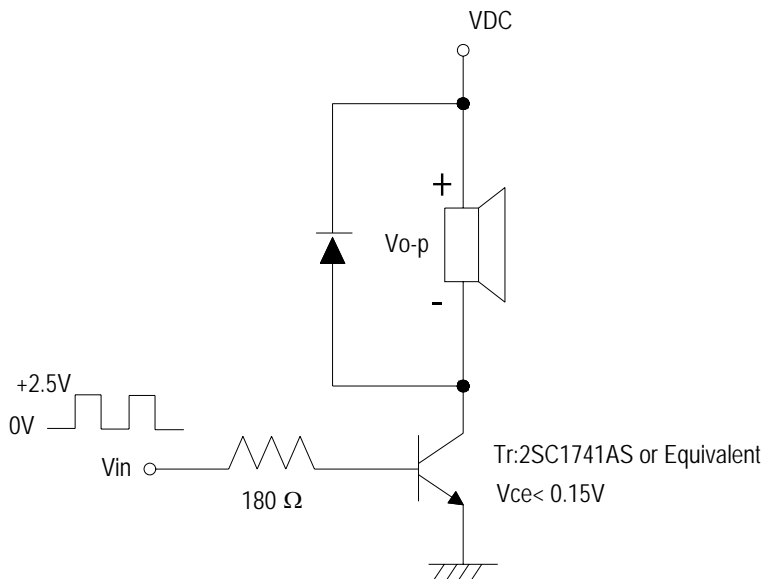
JUDGEMENT

Temperature : 20 \pm 3 $^{\circ}\text{C}$

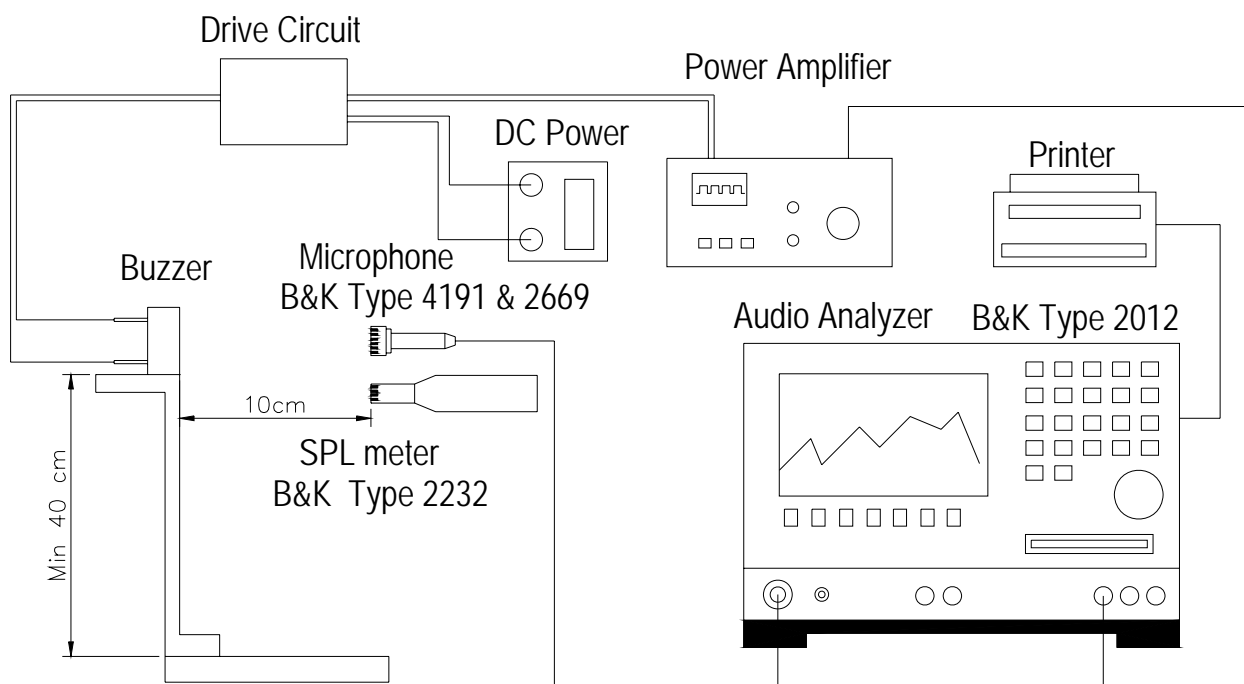
Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

Standard Drive Circuit

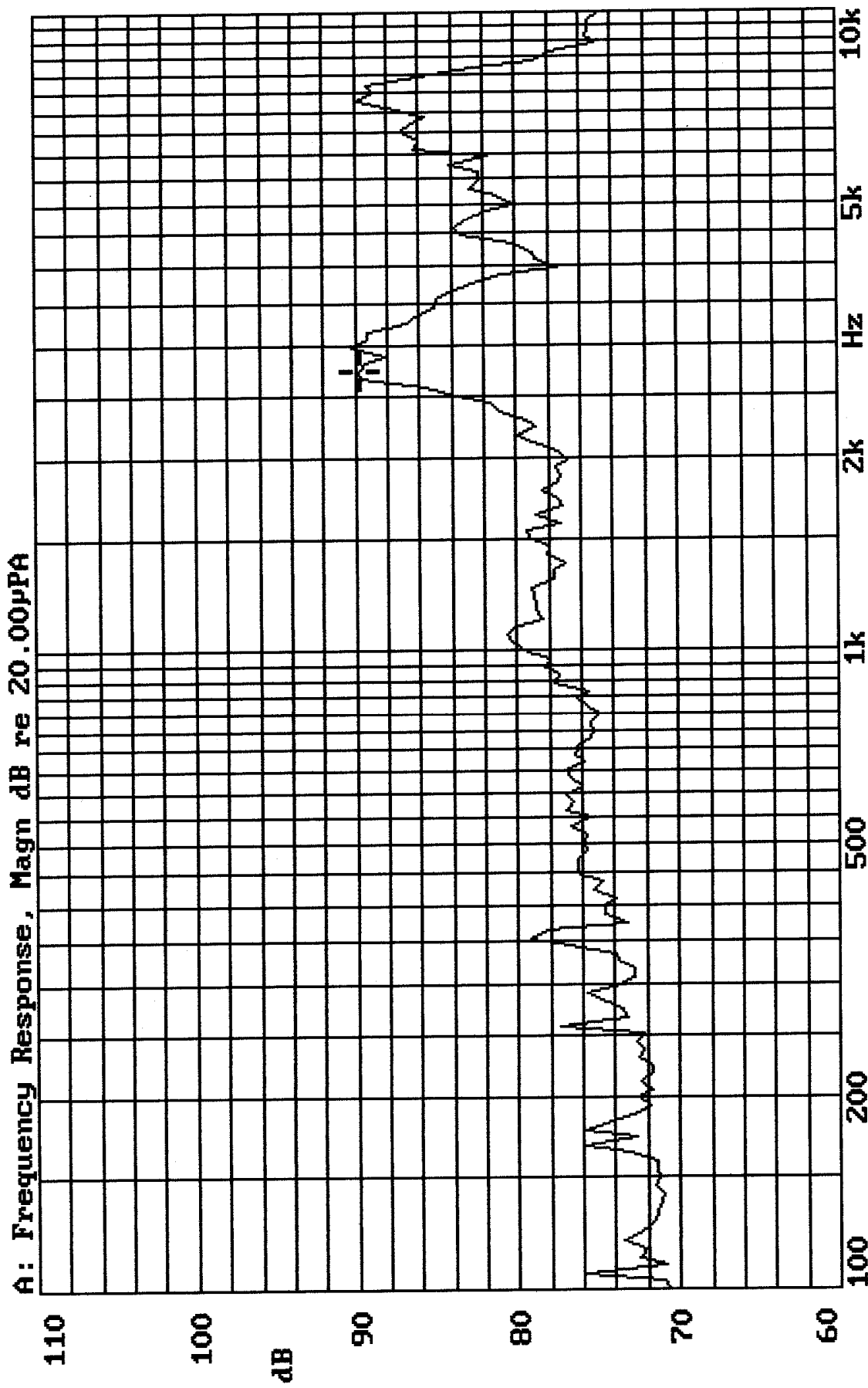


Standard Test Fixture

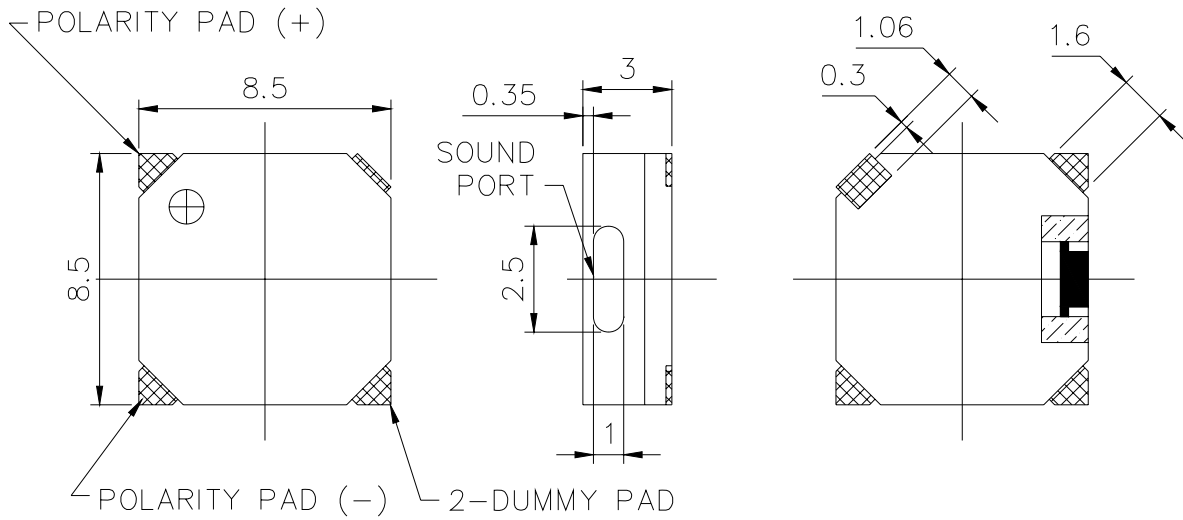


Frequency Response Curve

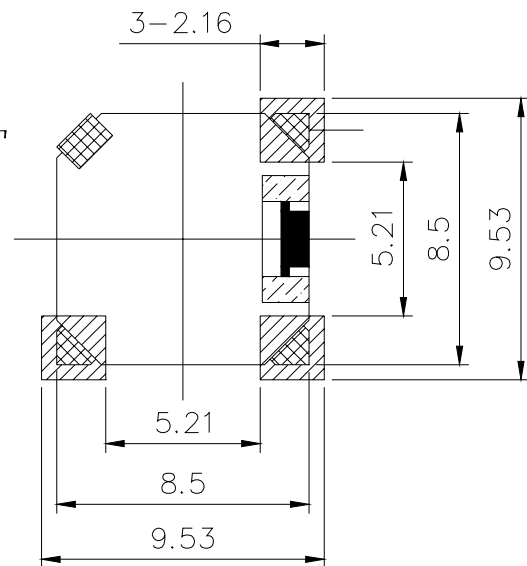
MODEL: AD-8504-CQ4
X: 2.7384kHz Y: 89.84dB ZA: Live Curve SSR T. RMS



Mode: SSR



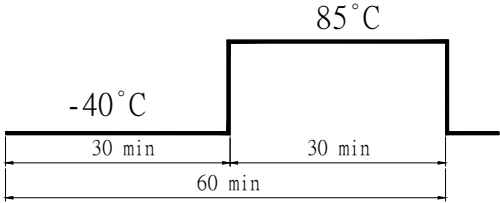
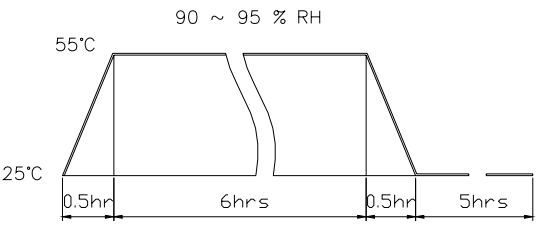
PCB LAYOUT



TITLE: SOUND TRANSDUCER (SMD)		DRAWN: Jack 04/08/2003	SCALE: 4:1	SHEET: 1 OF 1
PART NO. AD-8504-CQ4-LF	1	DESIGNED: R&D OF AAT	UNITS: mm	
DWG NO. DTE-1119		CHECKED:	TOLERANCE ± 0.2	
	REV	APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: LCP	ONE PLACE DECIMAL ± ***	
			TWO PLACE DECIMAL ± ***	
			THREE PLACE DECIMAL ± ***	



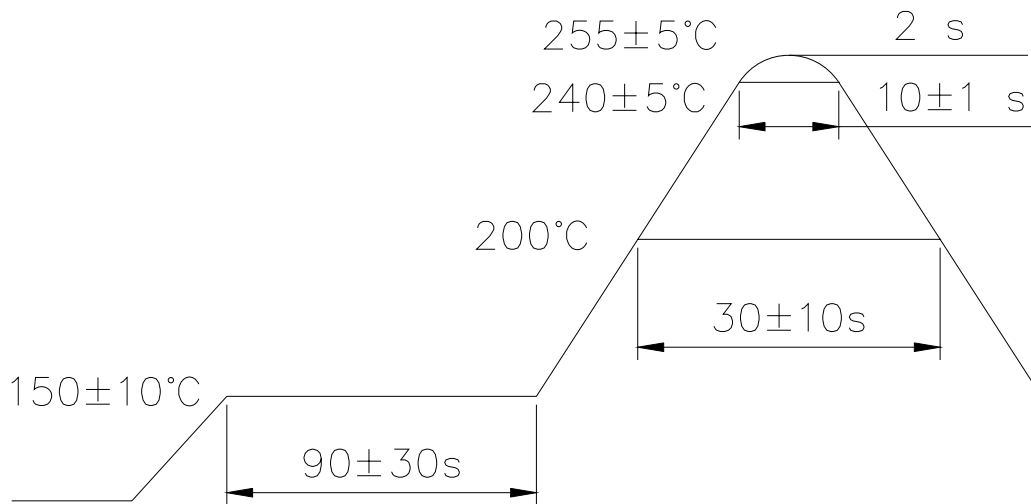
5.RELIABILITY TEST

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.	After the test the part shall meet specifications without Any degradation in appearance and performance except S.P.L S.P.L shall be 78dB or more.
02	Low temp.Storage life	The part shall be capable of withstanding a storage Temperature of -40°C for 96 hours.	
03	Temp. cycle	<p>The part shall be subjected 10 cycles. One cycle shall consist of;</p>  <p>The diagram shows a temperature cycle with a total duration of 60 minutes. It consists of a 30-minute hold at -40°C, followed by a 30-minute hold at 85°C.</p>	
04	Temp./Humidity cycle	<p>The part shall be subjected 10 cycles. One cycle shall be 12 hours and consist of</p>  <p>The diagram shows a 12-hour cycle. It starts with a 0.5-hour ramp from 25°C to 55°C. This is followed by a 6-hour hold at 55°C and 90 ~ 95 % RH. The cycle then has a 0.5-hour ramp down to 25°C, followed by a 5-hour hold at 25°C.</p>	
05	Operating life	<p>Rated Voltage,Frequency applied.</p> <ol style="list-style-type: none"> Ordinary temperature The part shall be subjected to 1000 hours at room temperature (25 ±10°C) High temperature The part shall be subjected to 500 hours at 75°C 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 .

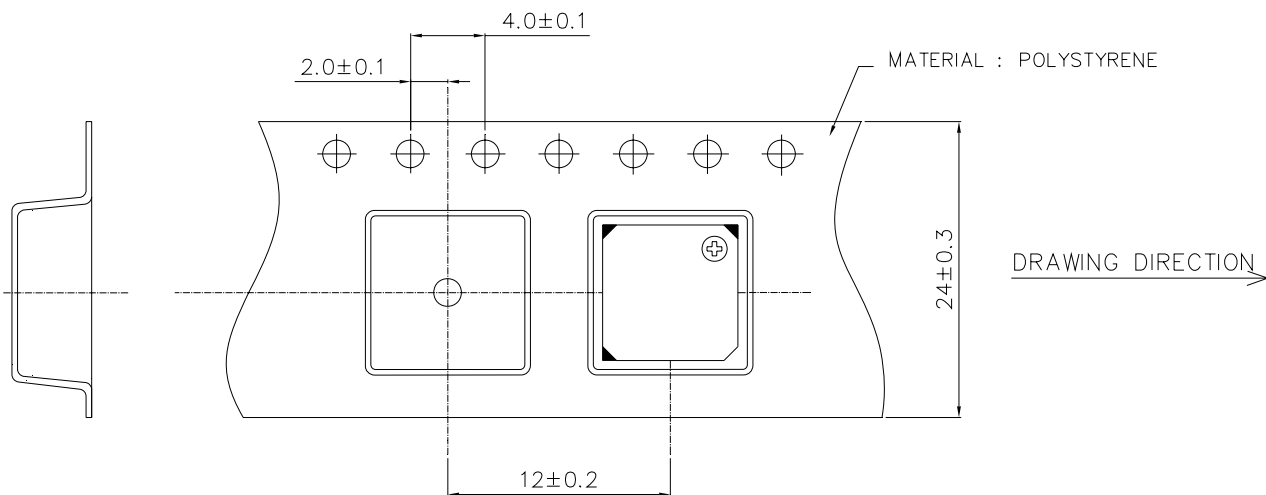


REV NO.

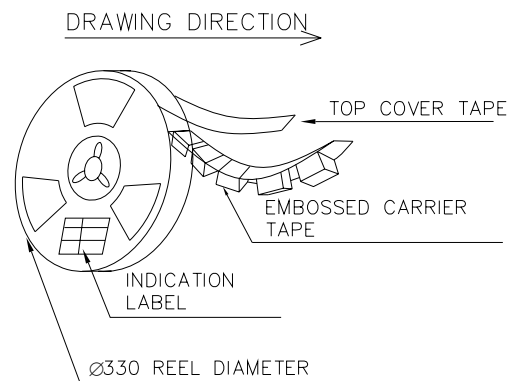
REVISION NOTE

APPROVAL

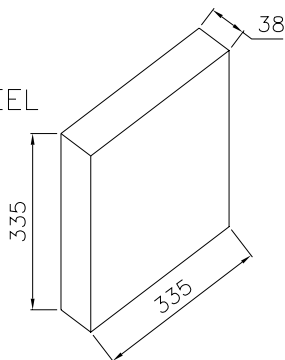
DATE



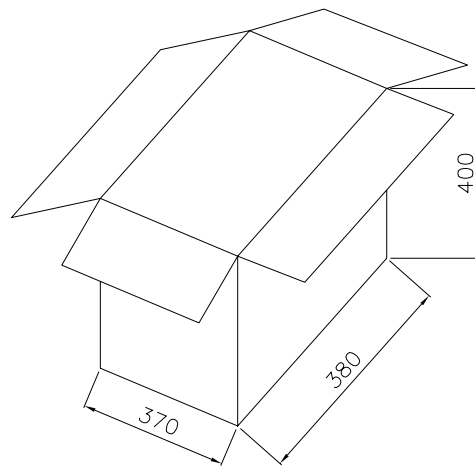
Q'TY : 1,000PCS/ REEL



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

TITLE: <i>PACKING FORMAIION</i>		DRAWN: <i>Lily</i> 2007/10/19	SCALE: NONE	SHEET: 1 OF 1
PART NO. <i>AD-8504-CQ4-LF</i>		DESIGNED: <i>R&D OF AAT</i>	UNITS: <i>mm</i>	
DWG NO. <i>DTD-2004-2</i>		CHECKED:	TOLERANCE ± ****	
		APPROVAL:	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: <i>LCP</i>		



ADVANCED ACOUSTIC TECHNOLOGY CORPORATION