

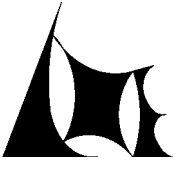
	DATE	03-04-2018	SPECIFICATION	ChangZhou Cre-Sound Electronics Co.,Ltd.
	PAGE	1/8		www.cre-soundbuzzer.com
	Rev.	A/0		www.wj-Lianhua.com
<i>MODEL NAME: LPT1230S-HL-03-4.0-16-RM</i>				

SPECIFICATION FOR APPROVAL PIEZO TRANSDUCER

Model Name	LPT1230S-HL-03-4.0-16-RM
Note	

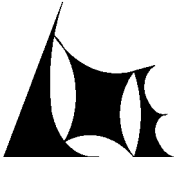
Product Photo	Cre-Sound
	DRAWING : 周文占
	CHECKED : 韦 娟
	APPROVED : 宋雪琪
Customer Confirmation:	

ChangZhou Cre-Sound Electronics Co.,Ltd.
Tel: +86-519-86322167 ; Fax: +86-519-86702455
E-mail:sales2@wj-lianhua.com

	DATE	03-04-2018	SPECIFICATION	ChangZhou Cre-Sound Electronics Co.,Ltd.	
	PAGE	2/8		www.cre-.0-16-Rsoundbuzzer	
	Rev.	A/0		.com www.wj-Lianhua.com	
MODEL NAME: LPT1230S-HL-03-4.0-16-RM					

Alteration History						
Change NO.	Note	Before of changes	After of changes	Reason	Revision	Rev.

ChangZhou Cre-Sound Electronics Co.,Ltd.
Tel: +86-519-86322167 ; Fax: +86-519-86702455
E-mail:sales2@wj-lianhua.com

	DATE	03-04-2018	SPECIFICATION	ChangZhou Cre-Sound Electronics Co.,Ltd.
	PAGE	3/8		www.cre-soundbuzzer.com
	Rev.	A/0		www.wj-Lianhua.com
MODEL NAME: LPT1230S-HL-03-4.0-16-RM				

Technical terms :

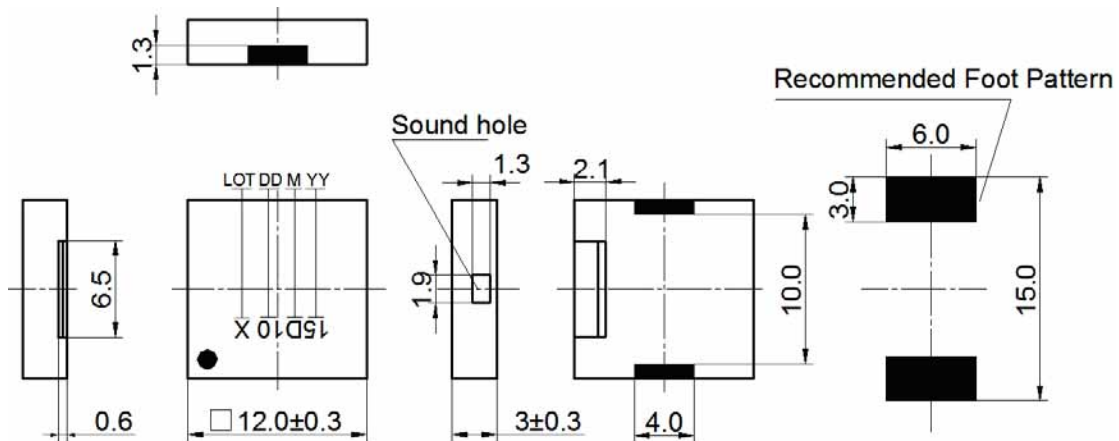
No.	Technical terms	Value
1	Rated Voltage(Vp-p)	3
2	Max Input Voltage(Vp-p)	25
3	*Rated Current(mA)	≤3
4	Capacitance at 100Hz (pF)	16000±30%
5	*Sound Output at 10cm(dB)	≥75
6	Resonance Frequency (KHz)	4.0±0.5
7	Operating Temperature()	-40 ~ +105
8	Storage Temperature()	-40 ~ +120
9	Weight (g)	0.35
10	Housing Material	LCP
11	RoHS	Yes
12	MSL(Moisture Sensitivity Level)	5a(30 /60%RH 24H Floor life)

*Value applying at rated voltage , 4.0KHz, 1/2 duty , square wave

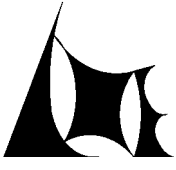
Test Basic State: Temp(20 ± 2),Humidity(40~70%RH),Air pressure(860~1060hPa).

DIMENSIONS (UNIT: mm)

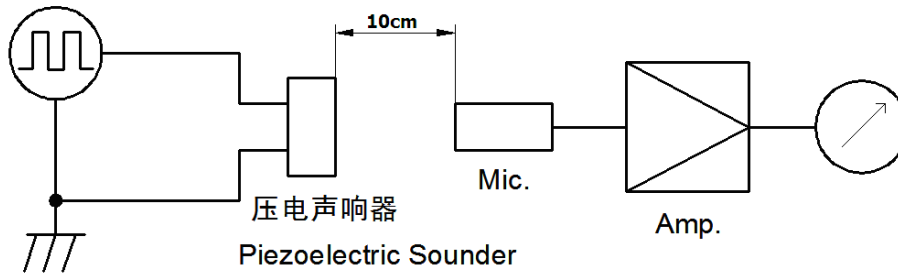
Tolerance: ± 0.5mm Except Specified



ChangZhou Cre-Sound Electronics Co.,Ltd.
Tel: +86-519-86322167 ; Fax: +86-519-86702455
E-mail:sales2@wj-lianhua.com

	DATE	03-04-2018	SPECIFICATION	ChangZhou Cre-Sound Electronics Co.,Ltd.
	PAGE	1/8		www.cre-soundbuzzer.com
	Rev.	A/0		www.wj-Lianhua.com
MODEL NAME: LPT1230S-HL-03-4.0-16-RM				

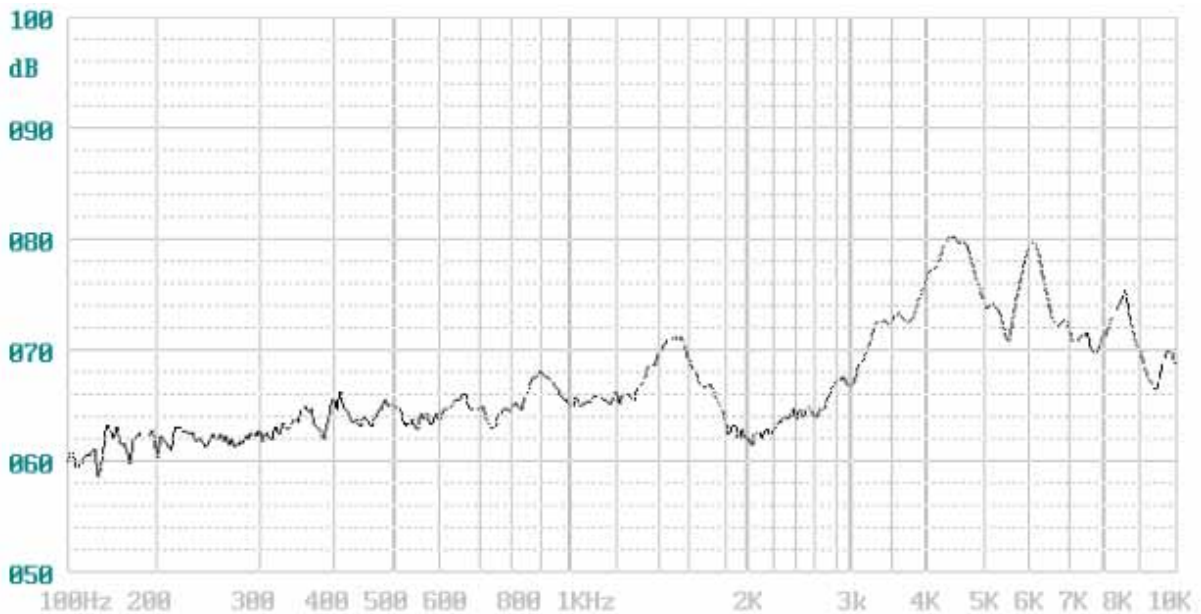
TEST METHOD:




MIC: ND10 普通声级计或等同品
MIC: ND10 Sound Meter or equivalent

信号发生器: DF1641D或等同品
Signal Generator: DF1641D or equivalent

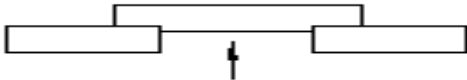
FREQUENCY RESPONSE:



ChangZhou Cre-Sound Electronics Co.,Ltd.
Tel: +86-519-86322167 ; Fax: +86-519-86702455
E-mail:sales2@wj-lianhua.com

	DATE	03-04-2018	SPECIFICATION	ChangZhou Cre-Sound Electronics Co.,Ltd.
	PAGE	5/8		www.cre-soundbuzzer.com
	Rev.	A/0		www.wj-Lianhua.com
	MODEL NAME: LPT1230S-HL-03-4.0-16-RM			

RELIABILITY TEST:

NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +85 for 120 hours	<i>All specifications must be satisfied after the test.</i>
2	Low temp. storage life	The part shall be capable of withstanding a storage temperature is -40 for 120 hours	
3	Temp. Cycle	Total 5 cycles, 1 cycle consisting of -40 ± 2 , 30 minutes 20 ± 5 15 minutes 85 ± 2 , 30 minutes 20 ± 5 15 minutes	
4	Humidity Test	40 ± 2 , 90 ~ 95% RH, 120 hours	
5	Vibration Test	The part shall be subjected to a vibration cycle is 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.	
6	Shock	Sounder shall be measured after being applied shock (980m/s ²) for each three mutually perpendicular directions to each of 3 times by half sine wave.	
7	Drop Test	Dropped naturally from 700mm height onto the surface of 10mm thick wooden board. 2 directions-upper and side of the part are to be applied.	
8	Lead pull	The part shall be pushed with a force of 9.8N for 10 ± 1 seconds behind the part. 	After the test part shall meet specifications without any degradation in appearance and performance.
9	Recommended temp. Profile for Reflow Oven	Shown in Fig.1	

Warranty: For a period of one year from date of manufacture under normal operations.



DATE 03-04-2018

PAGE 6/8

Rev. A/0

SPECIFICATION

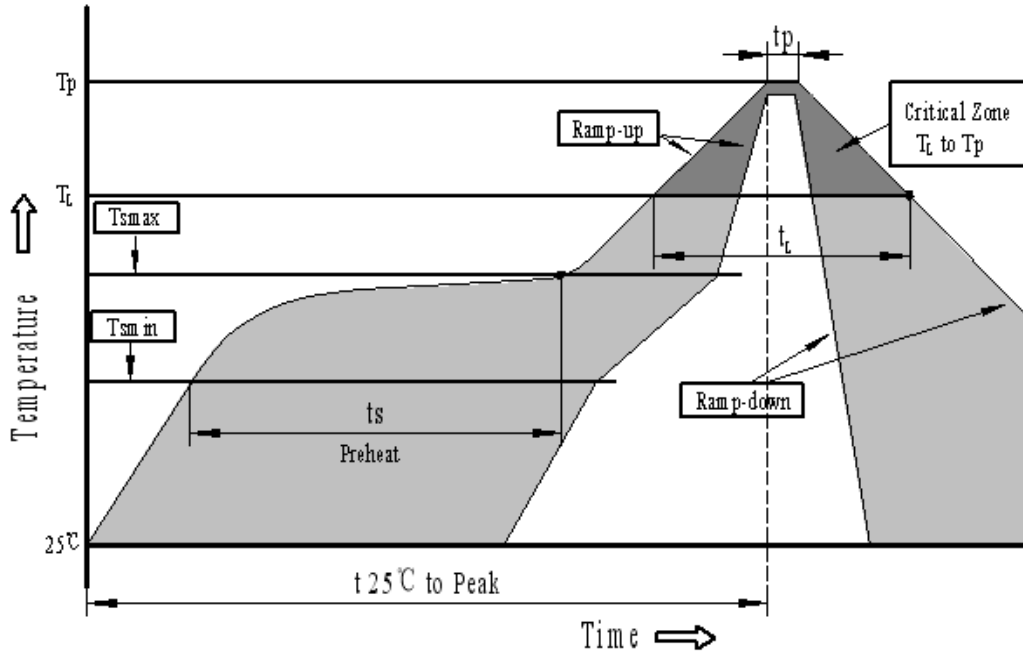
ChangZhou Cre-Sound Electronics Co.,Ltd.

www.cre-soundbuzzer.com

www.wj-Lianhua.com

MODEL NAME: LPT1230S-HL-03-4.0-16-RM

Recommended Temp. Profile for Reflow Oven (Fig.1)



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to T_p)	3 /second max.
Preheat	
-Temperature Min.(T_{smin})	150
-Temperature Min.(T_{smax})	200
-Temperature Min.(t_s)	60 ~ 180 seconds
T_{smax} to T_L	
-Ramp-up Rate	3 /second max.
Time maintained above:	
- Temperature(T_L)	217
-Time(T_L)	60 ~ 150 seconds
Peak temperature(T_p)	245 +0/-5
Time within 5 of actual Peak temperature (t_p)	6 seconds max.
Ramp-down Rate	6 /second max.
Time 25 to Peak Temperature	8 minutes max.
We suggest the customer do the reflow soldering once.	

ChangZhou Cre-Sound Electronics Co.,Ltd.
Tel: +86-519-86322167 ; Fax: +86-519-86702455
E-mail:sales2@wj-lianhua.com



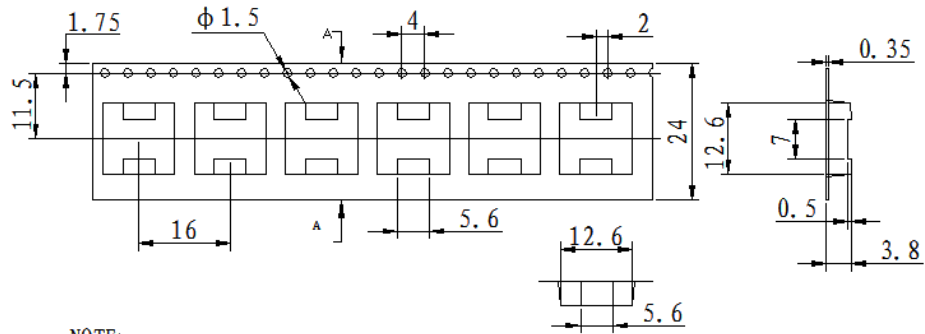
DATE 03-04-2018
 PAGE 7/8
 Rev. A/0

SPECIFICATION

ChangZhou Cre-Sound
 Electronics Co.,Ltd.
 www.cre-soundbuzzer.com
 www.wj-Lianhua.com

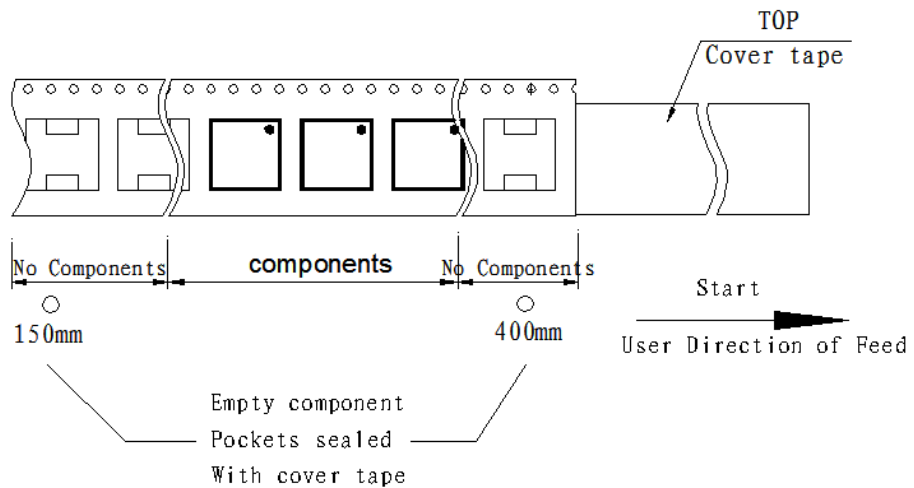
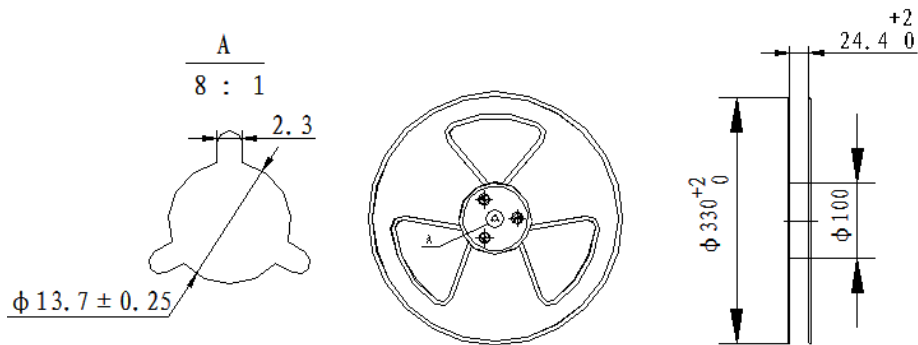
MODEL NAME: LPT1230S-HL-03-4.0-16-RM

PACKING:

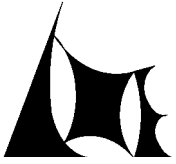


NOTE:

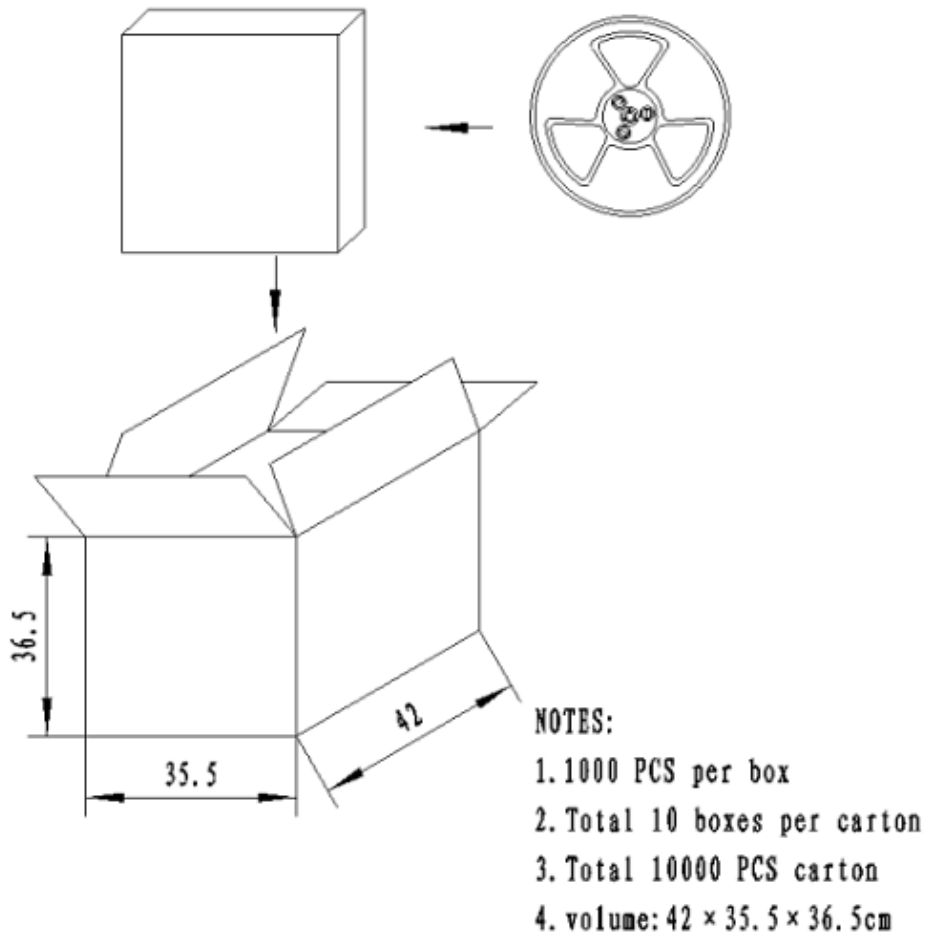
1. 10 sprocket hole pitch cumulative tolerance +/-0.2mm.
2. All dimensions meet EIA-481-D requirements.
3. Thickness: 0.35+/-0.05mm.
4. Component loaded per 13" reel: 1000pcs.



CHANGZHOU CRE-SOUND ELECTRONICS CO.,LTD.
 Tel: +86-519-86322167 ; Fax: +86-519-86702455
 E-mail:sales2@wj-lianhua.com

	DATE	03-04-2018	SPECIFICATION	ChangZhou Cre-Sound Electronics Co.,Ltd.
	PAGE	8/8		www.cre-soundbuzzer.com
	Rev.	A/0		www.wj-Lianhua.com
MODEL NAME: LPT1230S-HL-03-4.0-16-RM				

PACKING:



ChangZhou Cre-Sound Electronics Co.,Ltd.
Tel: +86-519-86322167 ; Fax: +86-519-86702455
E-mail:sales2@wj-lianhua.com