

SPECIFICATIONS SHEET FOR APPROVAL

EXTERNAL DRIVE PIEZO TRANSDUCER
P/N: PTS1230ALM

**DESCRIPTION: L12mm, W12mm, H3mm, EDPT, 4000Hz, 3Vp-p,
75dB at 10cm, 15000pF, SMD
RoHS Compliance (Directive 2002/95/EC)**

VERSION: 05

DATE: 21-Apr-2010

REVISIONS

VERSION	DESCRIPTION	DATE
01	Released from engineering	20-Nov-07
02	Added Terminal material & Recommend PCB layout	28-Dec-09
03	Added Max operating current, Housing material P/N & Housing color, Updated the tolerance in dimension drawing, frequency response curve & recommend reflow profile	22-Feb-10
04	Updated Solderability and Warranty details	16-Mar-10
05	Updated dimension drawing	21-Apr-10

SPECIFICATIONS SHEET

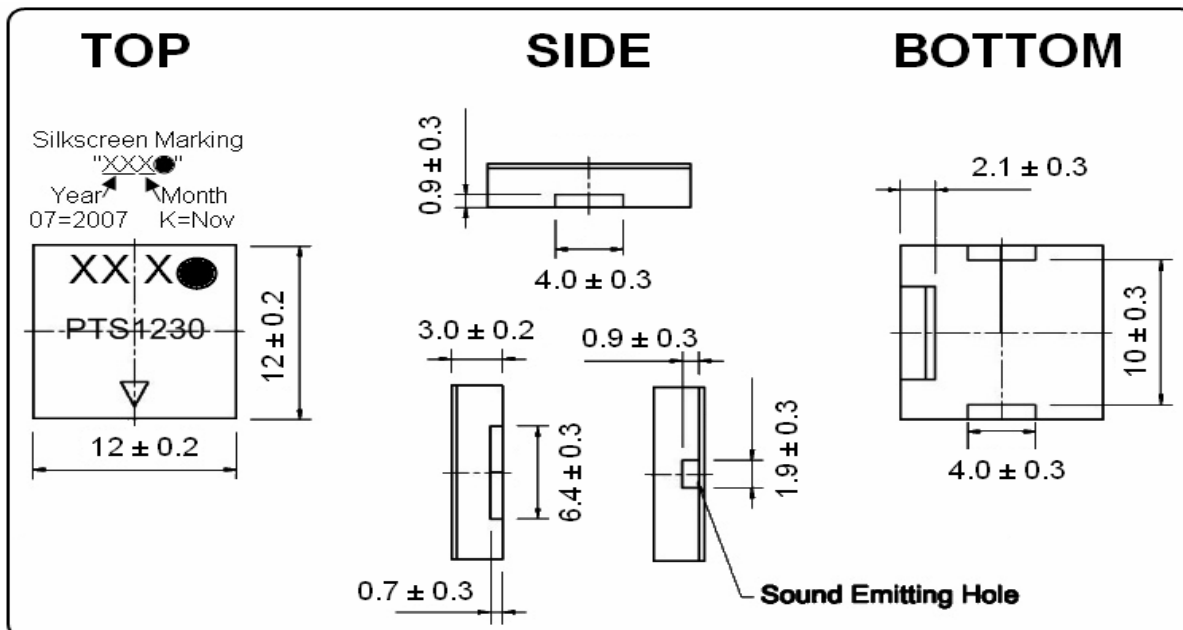
EXTERNAL DRIVE PIEZO TRANSDUCER
P/N: PTS1230ALM

1. SPECIFICATIONS

PARAMETERS	VALUES	UNITS
*MIN SOUND PRESSURE LEVEL AT 10cm	75	dB
RATED VOLTAGE	3	Vp-p
MAX OPERATING VOLTAGE	20	Vp-p
*MAX OPERATING CURRENT	1	mA
RESONANCE FREQUENCY	4,000	Hz
CAPACITANCE AT 100Hz	15,000 ± 30%	pF
OPERATING TEMPERATURE	-40 to +105	°C
STORAGE TEMPERATURE	-40 to +120	°C
HOUSING MATERIAL	LCP Vectra E130i	-
HOUSING COLOR	BLACK	-
TERMINAL MATERIAL	TIN PLATED BRASS	-
WEIGHT	0.8	g

*Value measured at 3Vp-p, 4,000Hz square wave input

2. DIMENSIONS (unit in mm)



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3. RELIABILITY TEST

Testing Criteria

All specifications (in page 2) must be satisfied after below tests.

(Recovery: 2 to 4 hrs of recovery under the standard condition after the removal from test chamber.)

1) Life Test

At 3 Vp-p, 1 minutes ON 1 minutes OFF in room temperature continuously for 1000 hours.

2) Temperature Test

a) High Temperature

Exposure at $+120 \pm 3^\circ\text{C}$ for 240 hours(Non-Functioning); Exposure at $+105 \pm 3^\circ\text{C}$ for 240 hours(Functioning)

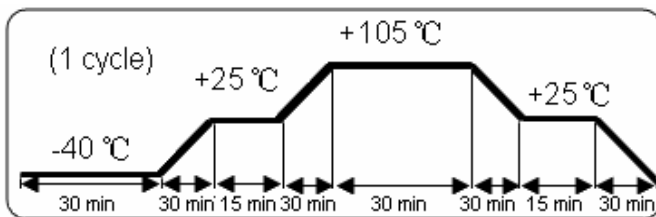
b) Low Temperature

Exposure at $-40 \pm 3^\circ\text{C}$ for 240 hours(Non-Functioning); Exposure at $-40 \pm 3^\circ\text{C}$ for 240 hours(Functioning)

3) Humidity Test

Exposure at $+40 \pm 3^\circ\text{C}$ and 90%-95% relative humidity for 240 hours.

4) Thermal Shock Test



Exposure to above temperature cycle for 5 times.

5) Drop Test

Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions – upper and side of the part are applied.

6) Vibration Test

Frequency: 10~55~10Hz Oct/min ,Amplitude: 1.5mm Duration: 2 hours in each 3 axes.

7) Shock

980m/s² (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each.

8) Soldering Heat Resistance

Samples put through reflowing soldering oven 2 times.

9) Solderability

Samples put on PCB with solder paste through reflowing soldering oven 1 time.

10) Warranty

For a period of one (1) year from date of delivery.

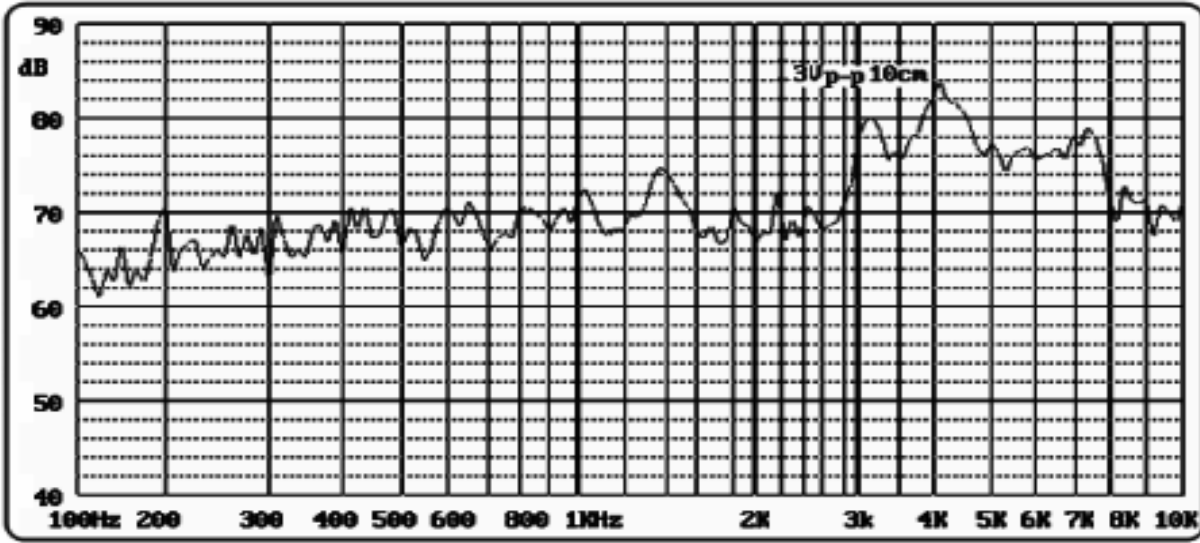
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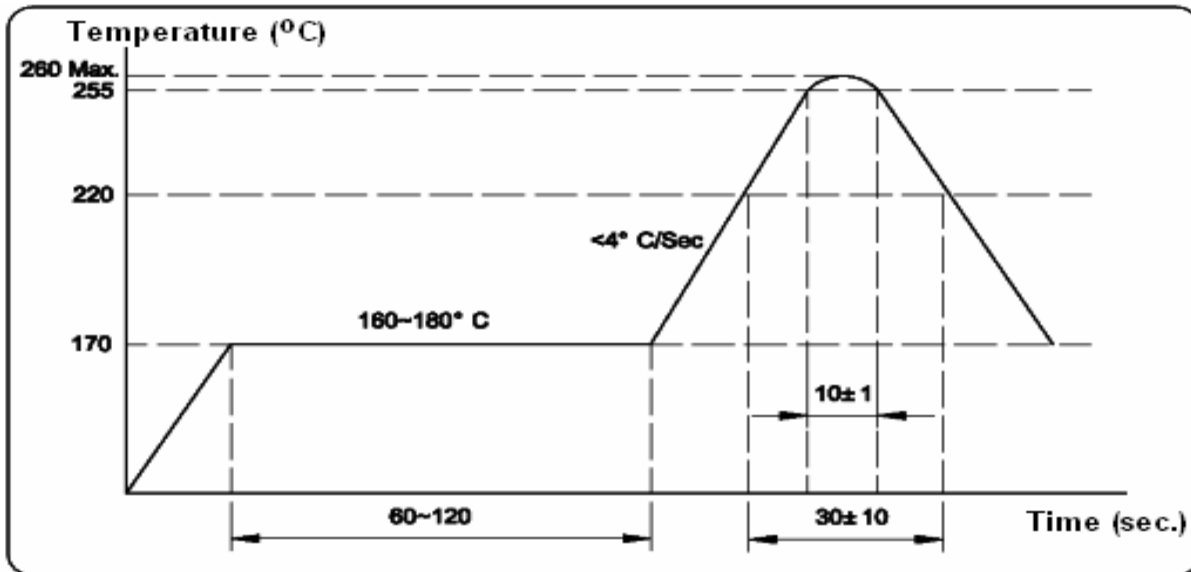
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4. Frequency Response Curve

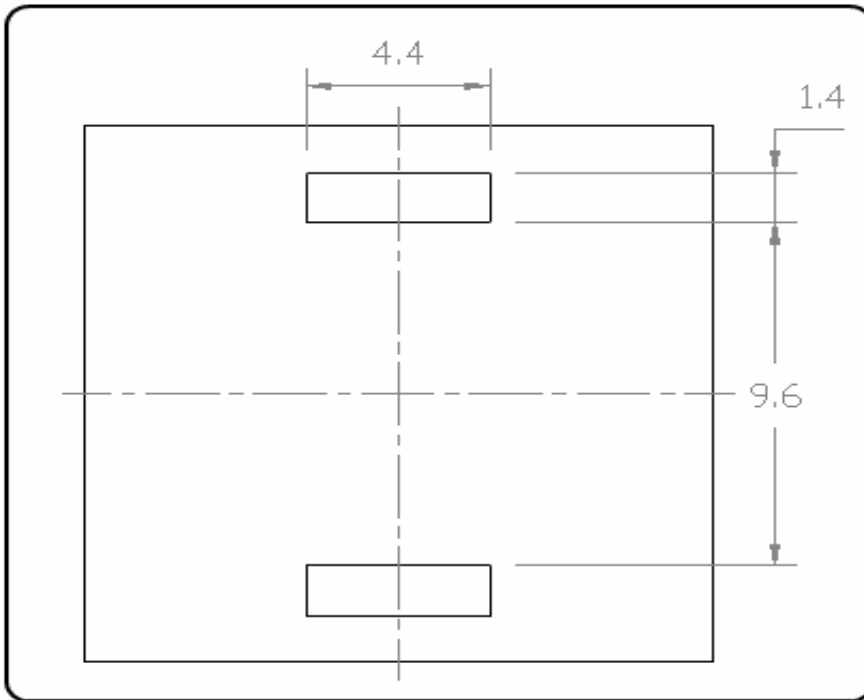


5. Recommend Reflowing Profile



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6. Recommend PCB Layout



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Unit 2307 • 23/F • Billion Trade Centre • 31 Hung To Road • Kwun Tong • Hong Kong

香港九龍觀塘鴻圖道31號鴻貿中心23樓07室

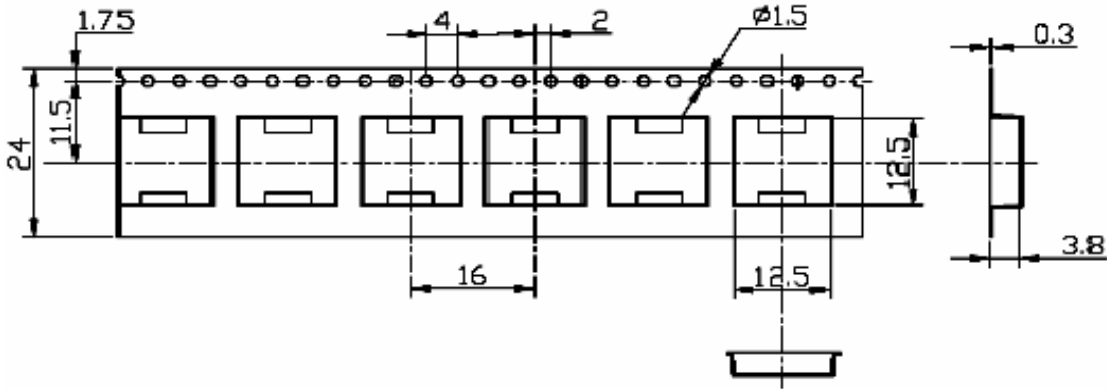
Tel: +852 2304 4000

Fax: +852 2304 7000

email: sales@hk-sound.com website: www.hk-sound.com

7. Packing Information

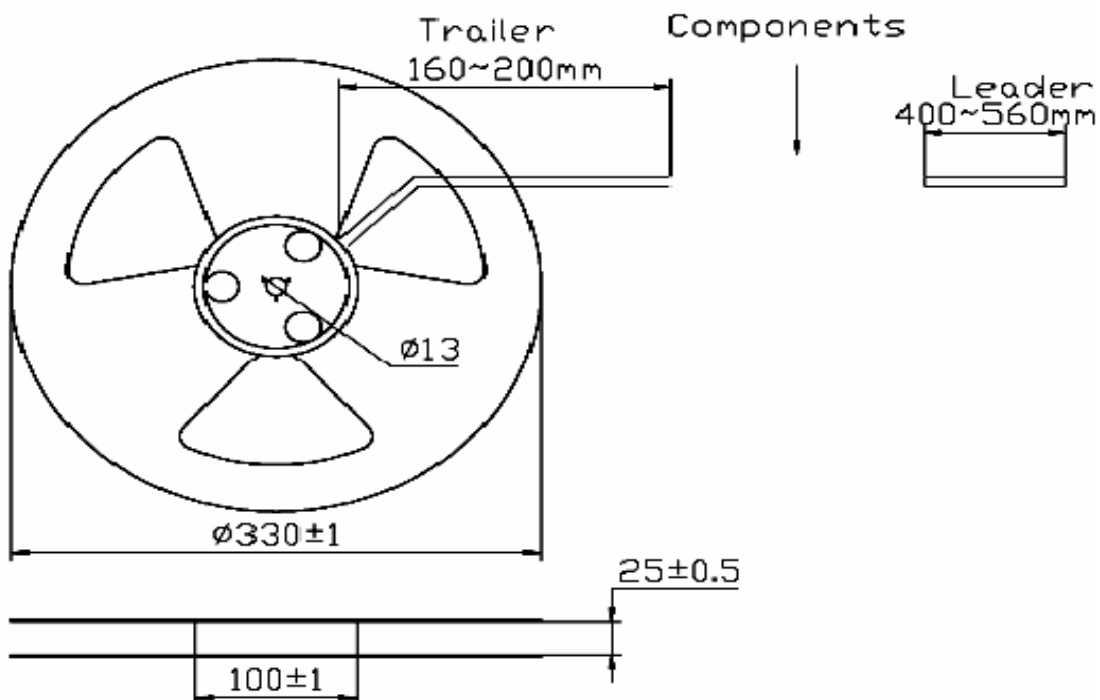
a) Tape



NOTE:

1. 10 sprocket hole pitch cumulative tolerance +/-0.20mm.
2. Carrier camber not to exceed 1 mm in 100 mm.
3. All dimensions meet EIA-481-2-A requirements.
4. Thickness: 0.40+/-0.05 mm.
5. Component loaded per 13" reel: 1000 pcs.

b) Reel



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香港九龍觀塘鴻圖道31號鴻貿中心23樓07室

Tel: +852 2304 4000

Fax: +852 2304 7000

email: sales@hk-sound.com

website: www.hk-sound.com