



SPECIFICATIONS SHEET FOR APPROVAL

EXTERNAL DRIVE PIEZO TRANSDUCER

P/N: PTS2311APM-01

DESCRIPTION: D23mm, H11.1mm, 4000Hz, 3Vp-p, 85dB at 10cm
19000pF ,SMD, RoHS Compliance (Directive 2002/95/EC)

VERSION: 01

DATE: 24-Dec-2013

REVISIONS

VERSION	DESCRIPTION	DATE
01	Released from engineering	24-Dec-2013

APPROVED BY :

CUSTOMER NAME :

DATE :

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EXTERNAL DRIVE PIEZO TRANSDUCER

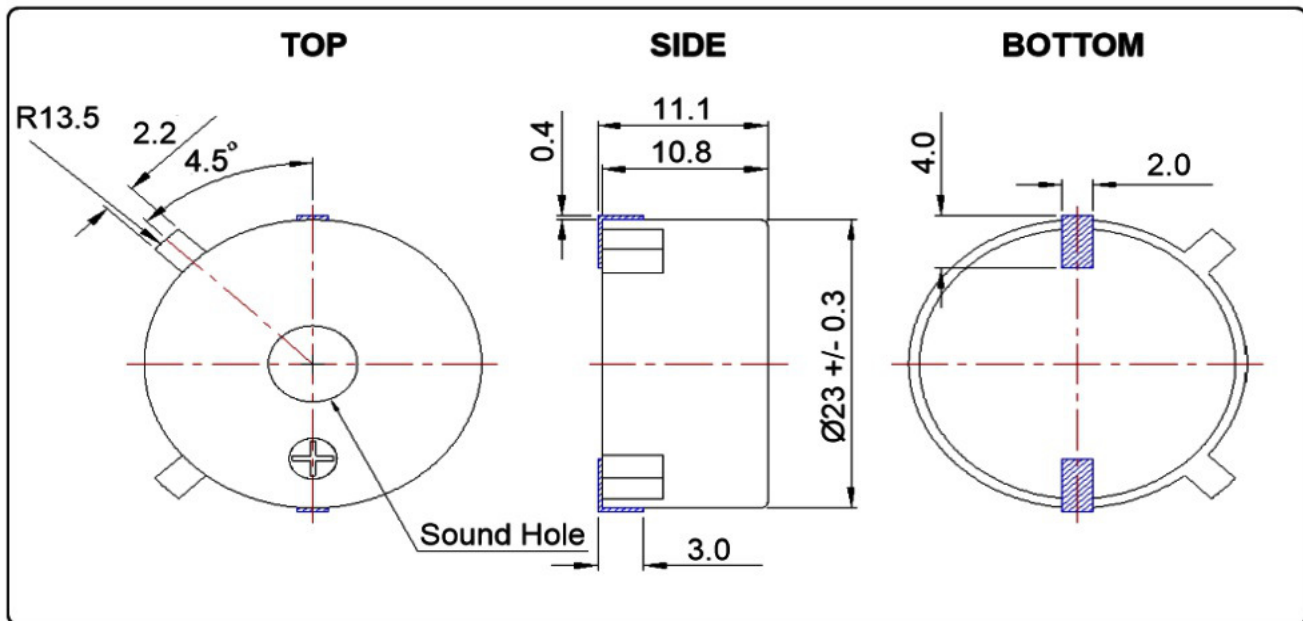
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1. SPECIFICATIONS

PARAMETERS	VALUES	UNITS
*MIN SOUND PRESSURE LEVEL AT 10 CM	85	dB
RATED VOLTAGE	3	Vp-p
MAX OPERATING VOLTAGE	40	Vp-p
RESONANCE FREQUENCY	4,000	Hz
CAPACITANCE AT 1000Hz	19,000 ± 30%	pF
OPERATING TEMPERATURE	-30 to +70	°C
STORAGE TEMPERATURE	-30 to +85	°C
HOUSING	PPS	-
WEIGHT	4.5	g

*Value applying rated voltage and resonance frequency

2. DIMENSIONS (unit in mm)



Tolerance: ± 0.5 mm except specified

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All specifications subject to change without notice

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

Operate at 3 Vp-p in room temperature continuously for 1000 hrs.

2) Temperature Test

a) High Temperature

Exposure at $+85 \pm 3^\circ\text{C}$ for 240 hours(Non-Functioning); Exposure at $+70 \pm 3^\circ\text{C}$ for 240 hours(Functioning)

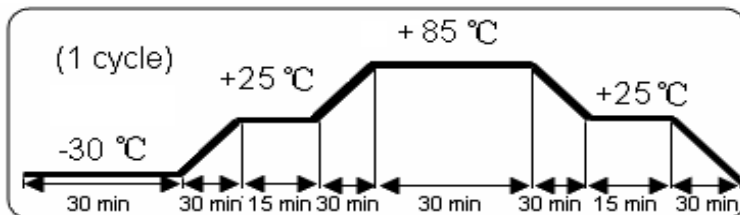
b) Low Temperature

Exposure at $-30 \pm 3^\circ\text{C}$ for 240 hours(Non-Functioning); Exposure at $-30 \pm 3^\circ\text{C}$ 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 twice.

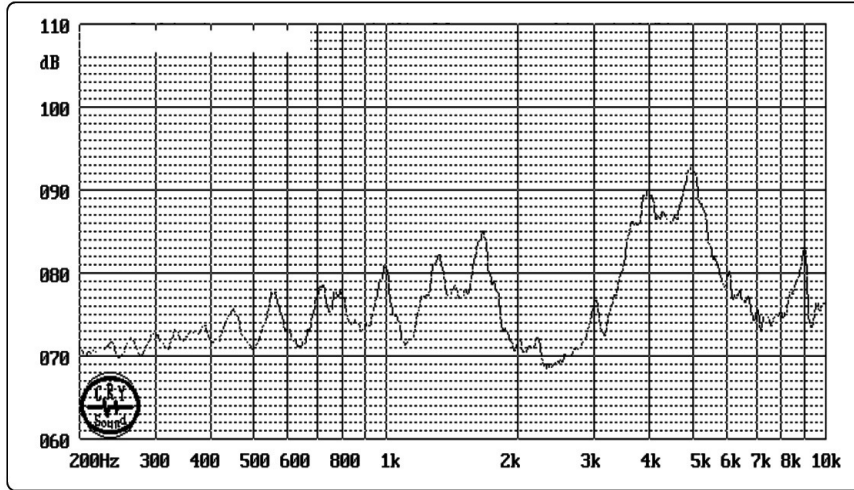
9) Solderability

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

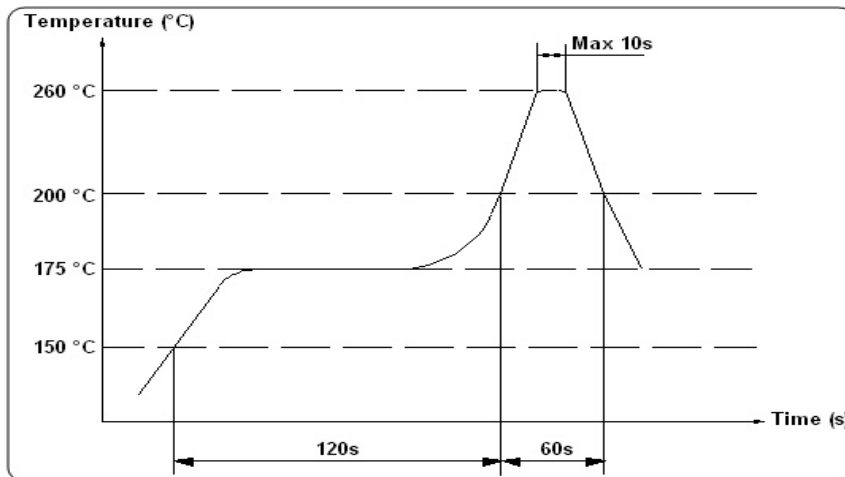
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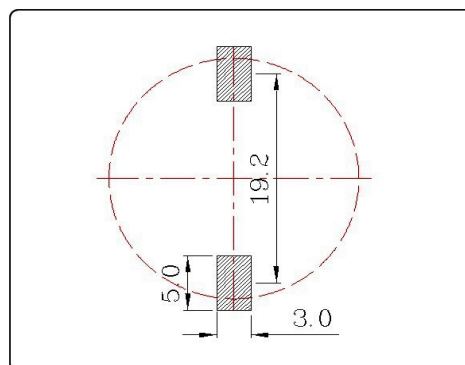
4. Frequency Response Curve



5. Recommend Reflowing Profile



6. Recommend PCB layout



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