



# PUI audio

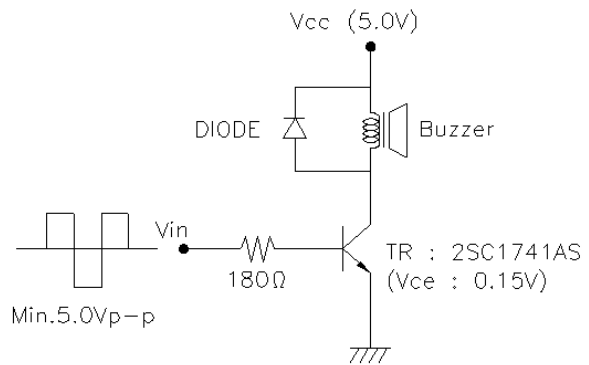
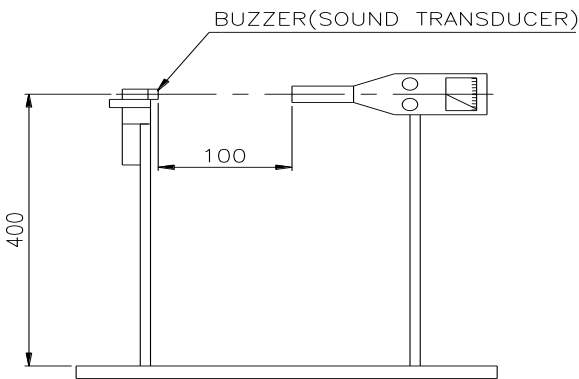


Data Sheet	SMT-0823-S-R
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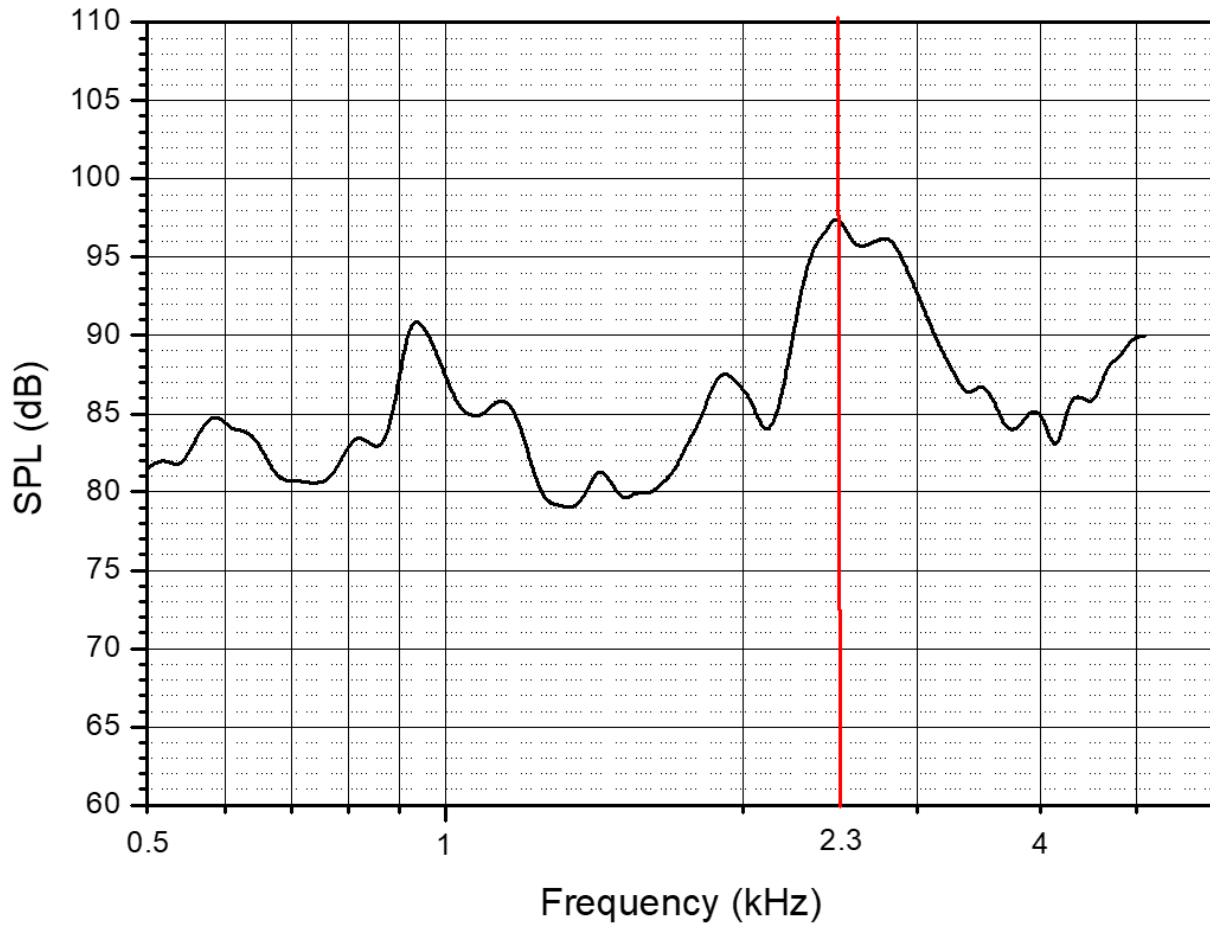
## Specifications

Parameters	Values	Units
Rated Voltage	5	V
Operating Voltage Range	4 ~ 6	V
Current Draw at Rated Voltage	90 Max.	mA
Coil Resistance	$32 \pm 4.5$	Ohms
Minimum SPL @ 10cm	87	dBA
Resonant Frequency	$2300 \pm 500$	Hz
Weight	0.4	Grams
Environmental Compliances	RoHS/REACH	-
Moisture Sensitivity Level (MSL)	2	-
Storage Temperature	-40 ~ 85	°C
Operating Temperature	-30 ~ 105	°C

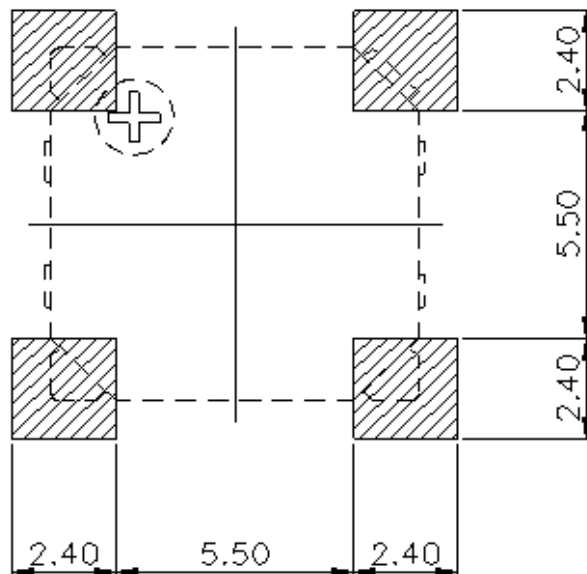
## Measurement Method (Temp: 5 ~ 35 °C; Humidity: 45 ~ 85%; Distance 10cm, 5Vpp, 2300Hz square wave)



## Typical Frequency Response

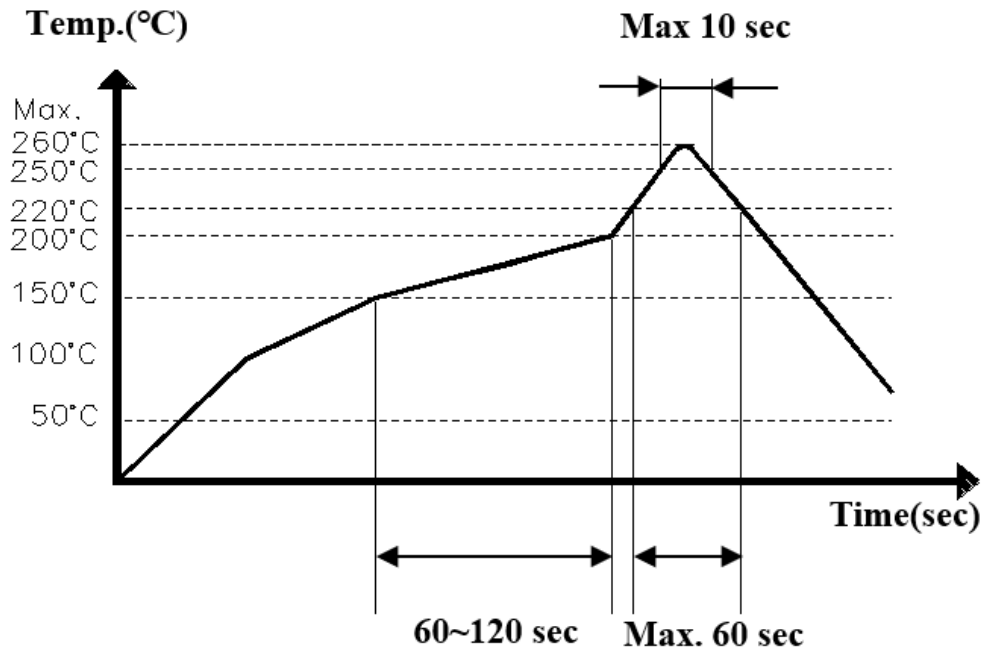


## Recommended Land Pattern



## Recommended Reflow Profile

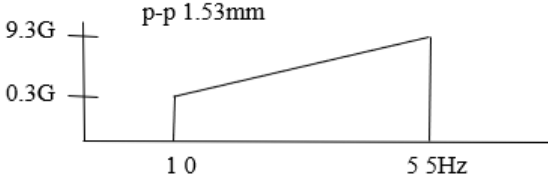
- Recommendable reflow soldering condition is as follows.  
 Note 1; It is requested that reflow soldering should be executed after heat of product goes down to normal temperature.  
 Note 2; Peak reflow temperature of 260°C, with a maximum duration of 60 sec. between 220°C and 260°C



\* Reflow profile of lead-free solder

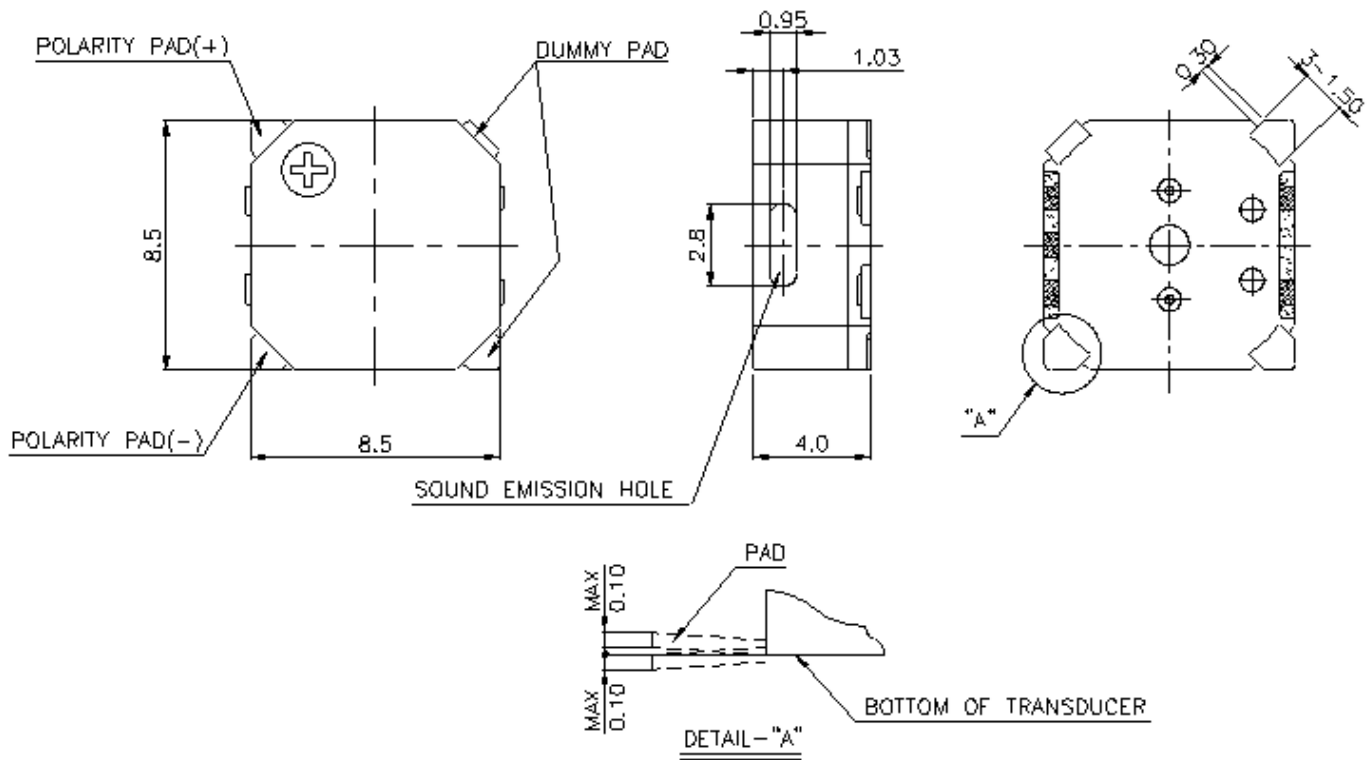
## Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at 85°C
Low Temperature Test	96 hours at -40°C
Humidity Test	12 hours at 60°C with relative humidity at 95%
Temperature Cycle Testing	Run the test for 5 cycles, with each cycle consisting of: 

Vibration Test	 <p>Make this test for the directions of X, Y and Z for 2 hours each (total 6 hours).</p>
Drop Test	<p>Fix transducer on PCB with polyester film(t=0.2mm, gross weight: 100g) and the height of 120cm on each of the six surfaces 3 times each.</p>

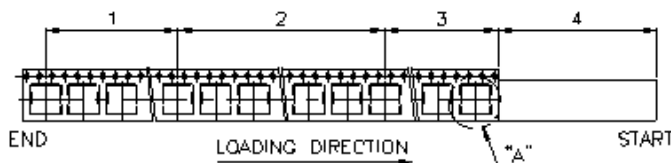
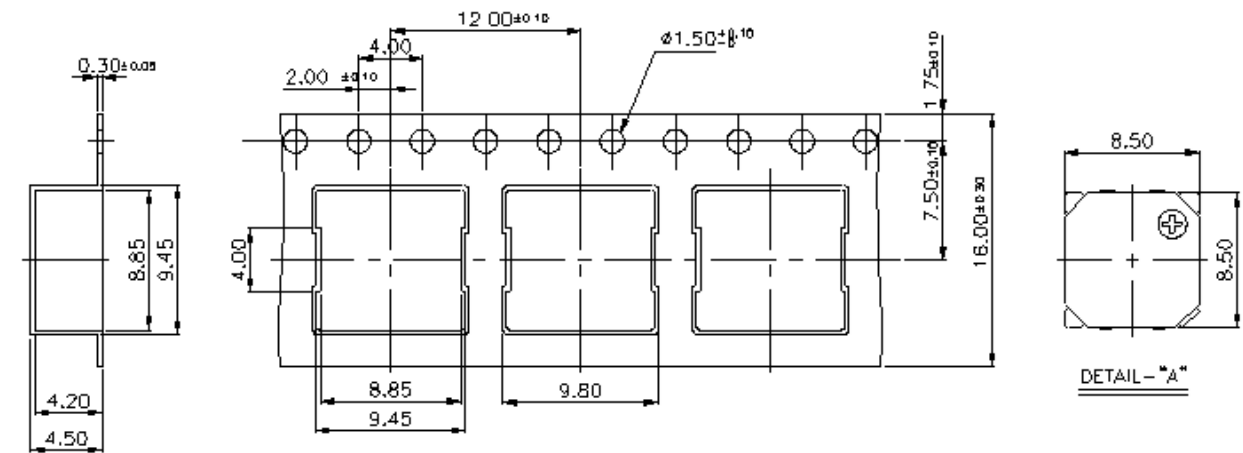
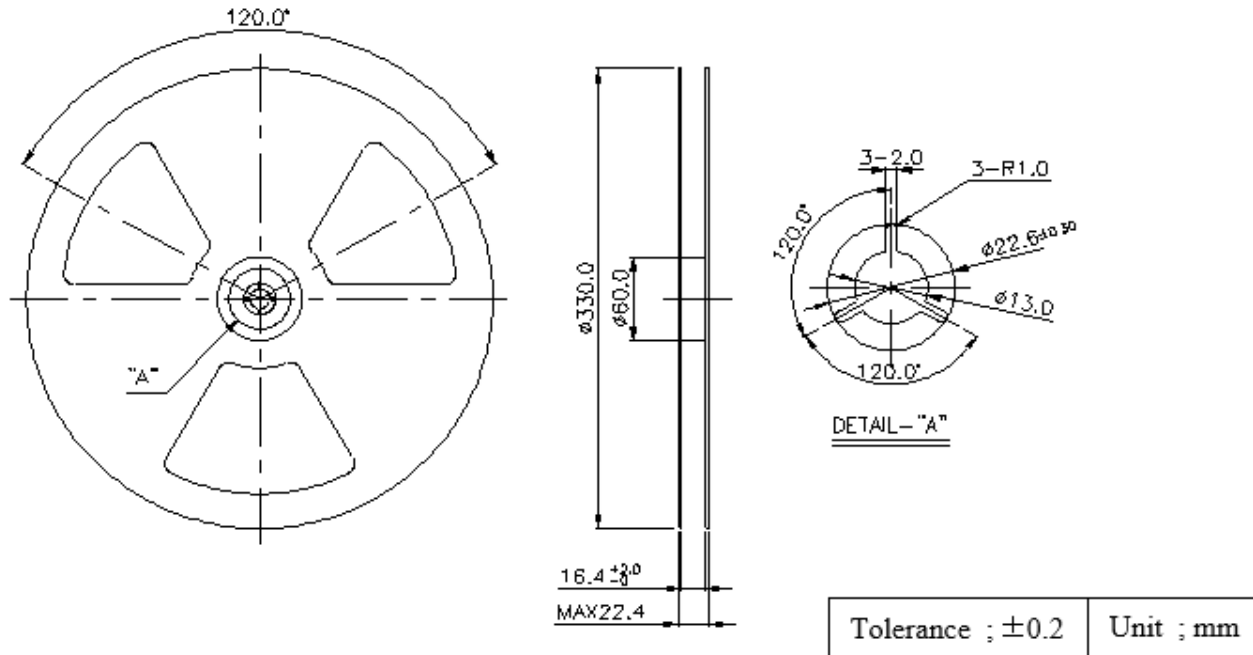
After reliability test, let rest for 2 hours.

### Dimensions

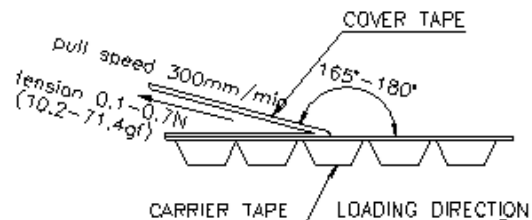


Tolerance:  $\pm 0.2\text{mm}$

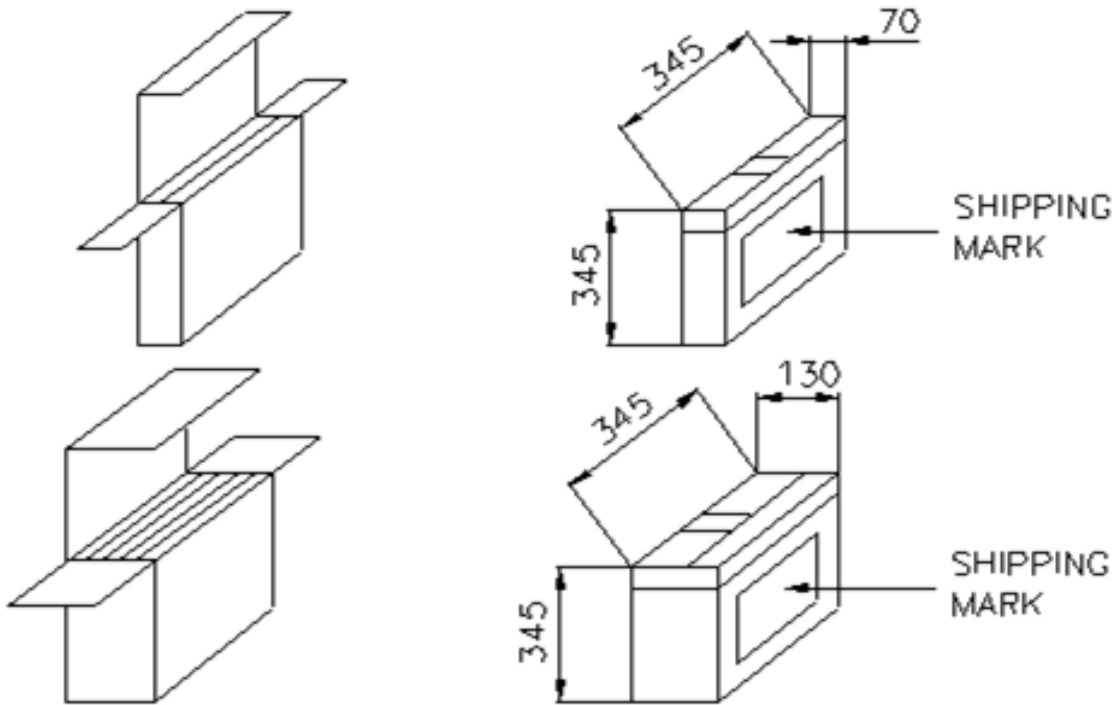
## Packaging



1. BARE EMBOSS AREA : 400mm OVER(35PCS OVER)
2. CHIP MOUNT AREA : 1,000PCS
3. BARE EMBOSS AREA : 400mm OVER(35PCS OVER)
4. LEADER AREA : 100mm OVER



Tolerance ; ±0.2	Unit ; mm
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**1000pcs per reel**  
**2 or 5 reels per master carton**

**Specifications Revisions**

Revision	Description	Date
-	Released from Engineering	04/01/2005
A	Updated ROHS Status	05/09/2005
B	Revised to Inventor 3D Template	11/01/2007
C	Revised Voltage Range, Rated Current, Operating Temperature, and Environmental Compliances note, add MSL level 2	08/23/2023

Note:

1. Unless otherwise specified:
  - A. All dimensions are in millimeters.
  - B. Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .
2. Specifications subject to change or withdrawal without notice.