



# PUIaudio



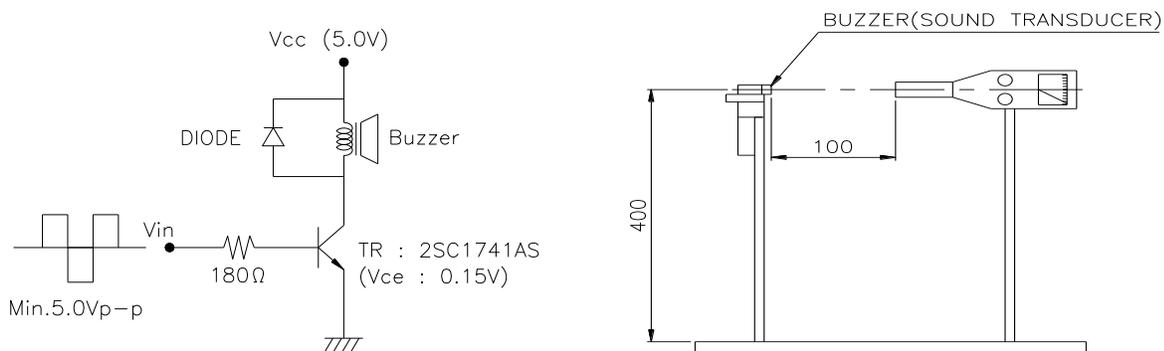
Data Sheet

SMT-1427-S-R

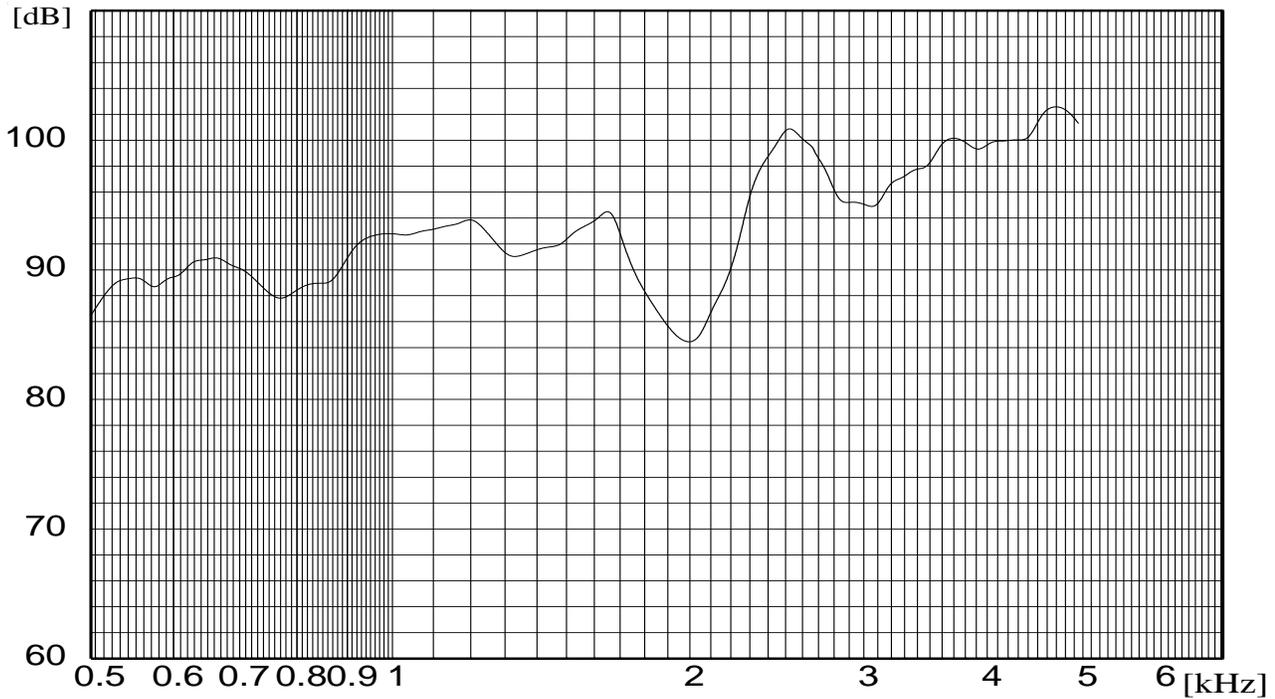
## Specifications

Parameters	Values	Units
Rated Voltage	5	V0-pk
Operating Voltage Range	3-7	V0-pk
Current Draw at Rated Voltage	80 (Max)	mA
Coil Resistance	30±4.5	Ohms
Minimum SPL @ 10cm	85	dBA
Resonant Frequency	2700 ± 500	Hz
Housing Material	LCP	-
Terminal Material	Sn Plated Phosphor Bronze	-
Weight	0.7	Grams
Acceptable Soldering Methods	Hand Solder, Reflow Solder	See following pages
Environmental Compliances	ROHS/REACH	-
Moisture Sensitivity Level (MSL)	2	-
Storage Temperature	-40~85	°C
Operating Temperature	-30~60	°C

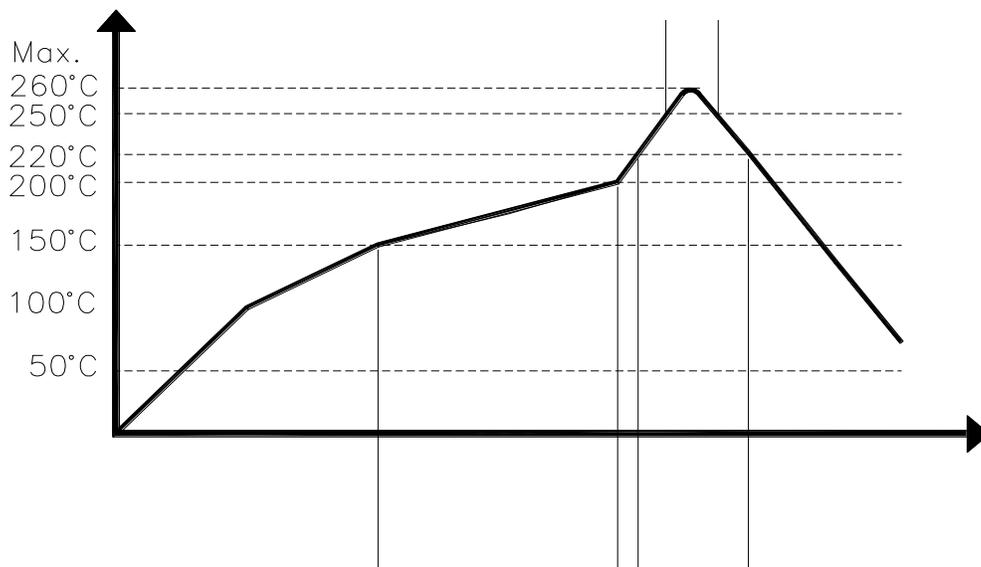
## Measurement Method (Square Wave 5Vpk, 2.7kHz @ 10cm)



## Typical Frequency Response (d= 10cm)

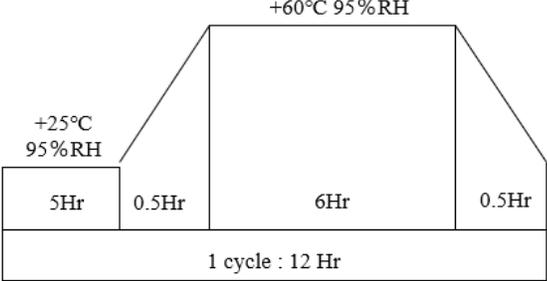
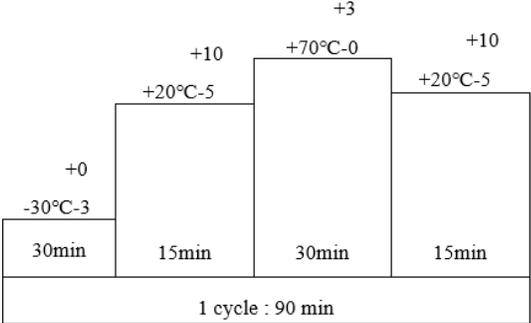
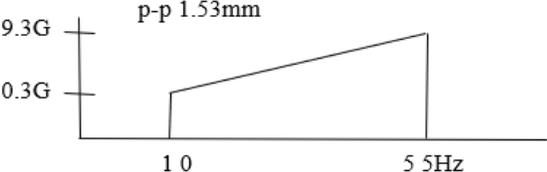


## Recommended Soldering Procedure



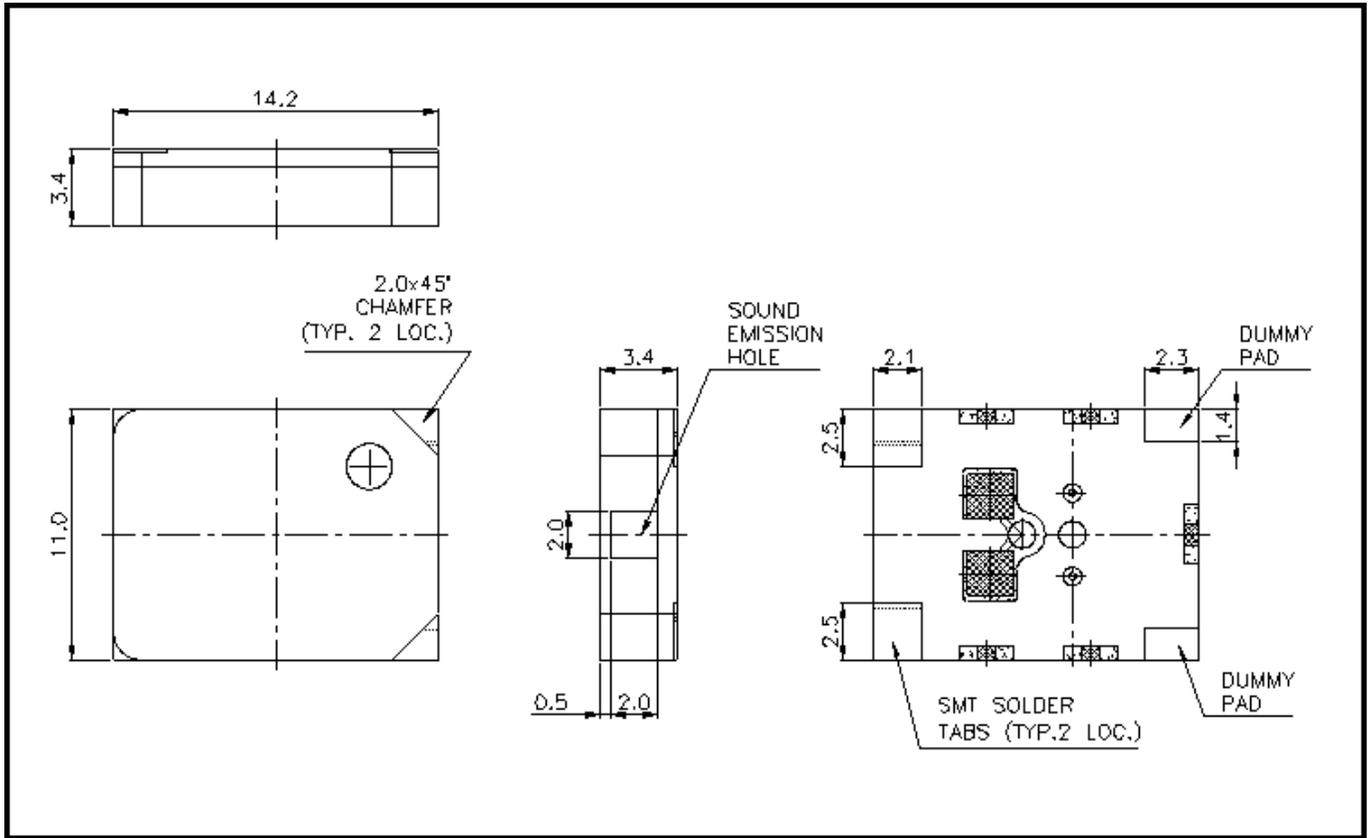
- \* Reflow profile of lead-free solder
- \* Manual Soldering: 350°C within 5 sec.

## Reliability Testing

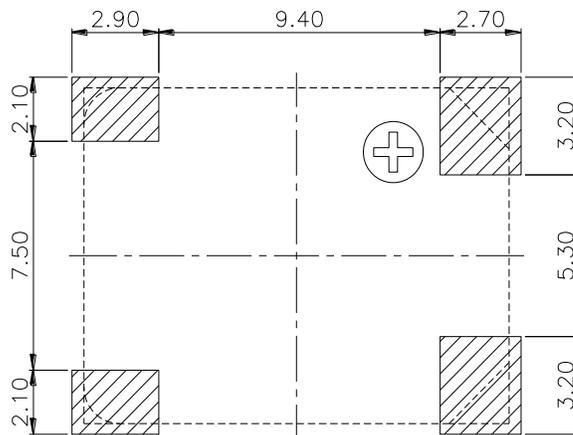
Type of Test	Test Specifications
High Temperature Test	96 hours at 85°C, then expose to room temperature for 2 hours.
Low Temperature Test	96 hours at -40°C, then expose to room temperature for 2 hours.
Humidity Test	 <p>Make the test above for 10 cycles, then expose to room temperature for 2 hours.</p>
Temperature Cycle Testing	 <p>Make the test above for 5 cycles, then expose to room temperature for 2 hours.</p>
Vibration Test	 <p>Make the test above for each direction (x, y, z) for 2 hours.</p>
Drop Test	From a height of 120cm, drop onto six surfaces, 3 times.

**After the tests, no significant change both in appearance and structure is observed. Change in sound output should be within  $\pm 5$ dB.**

## Dimensions

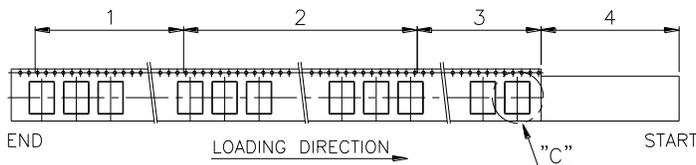
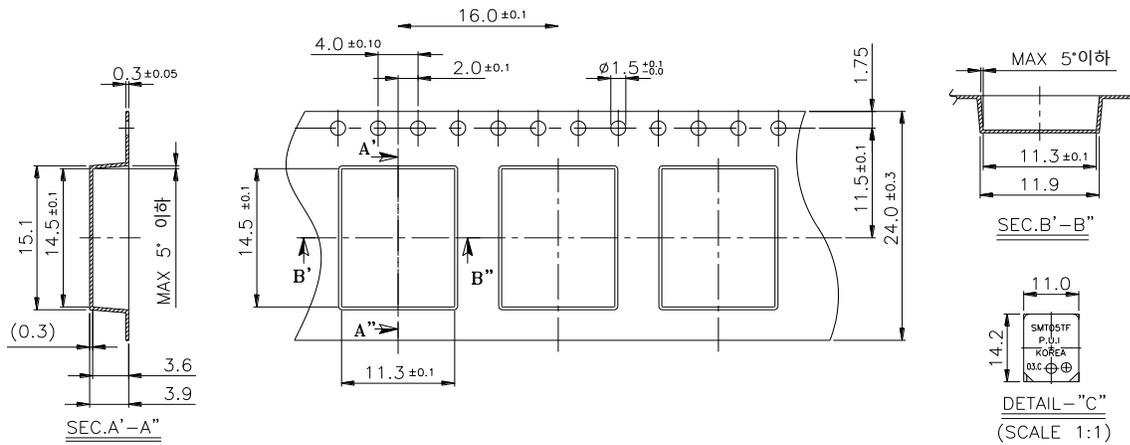
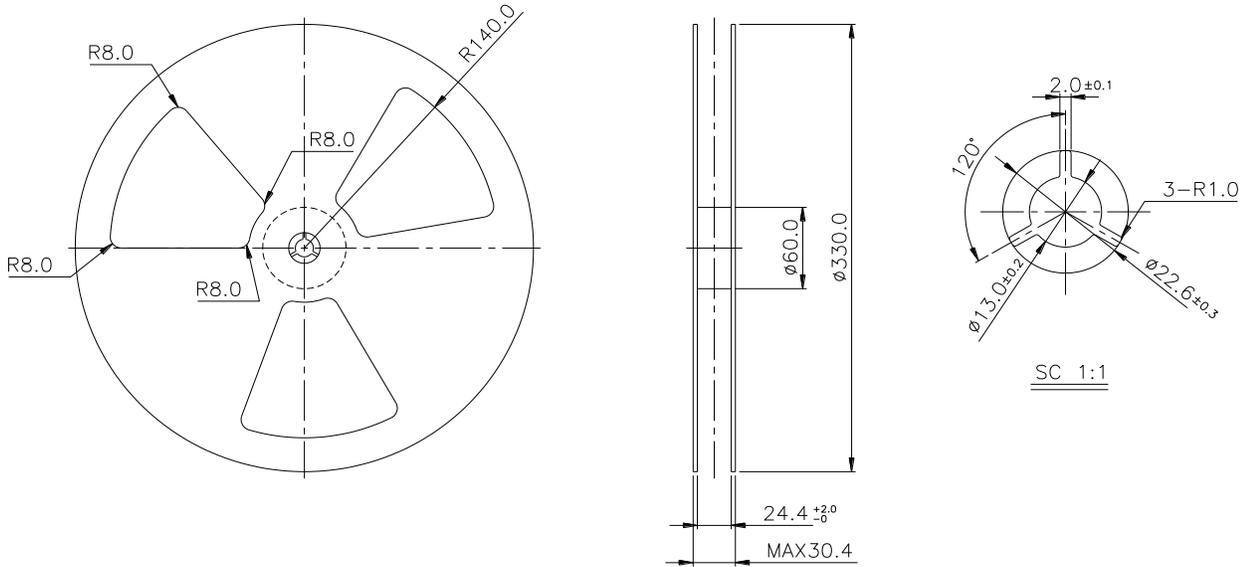


## Suggested Land Pattern\* (for surface mount parts)

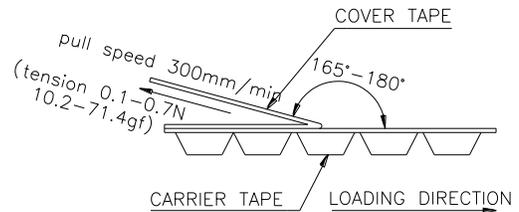


\*This land pattern is advisory only and its use or adaptation is entirely voluntary. PUI Audio disclaims all liability of any kind associated with the use, application, or adaptation of this land pattern.

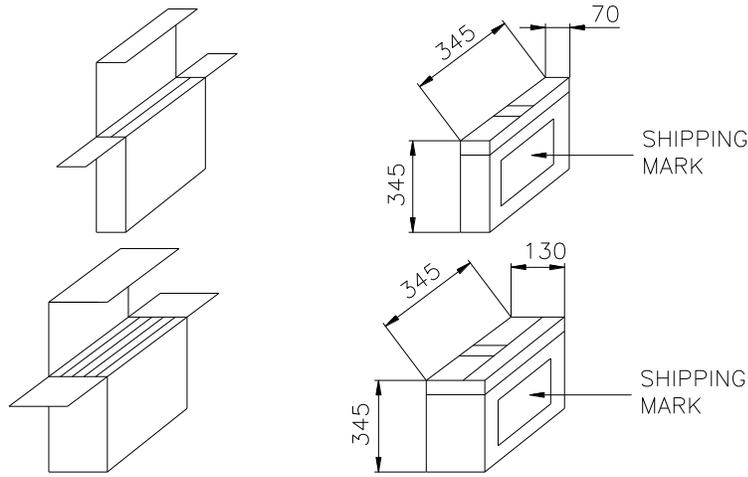
# Packaging



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



1,000 PCS per 1roll by using the tapping M/C.  
 2rolls or 4rolls per 1 double(thick) carton box packed by polypropylene tape.



**Specifications Revisions**

Revision	Description	Date	Approved
-	Released from Engineering	05/09/2006	-
A	Revised to Inventor 3-D drawing template	05/10/2010	BR
B	Updated Spec Format, Add details for Reliability, Packaging, etc. Add MSL 2	02/24/2025	ML

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.