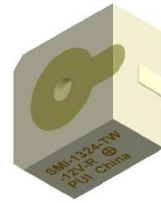




# PUI audio



Data Sheet

SMI-1324-TW-12V-R

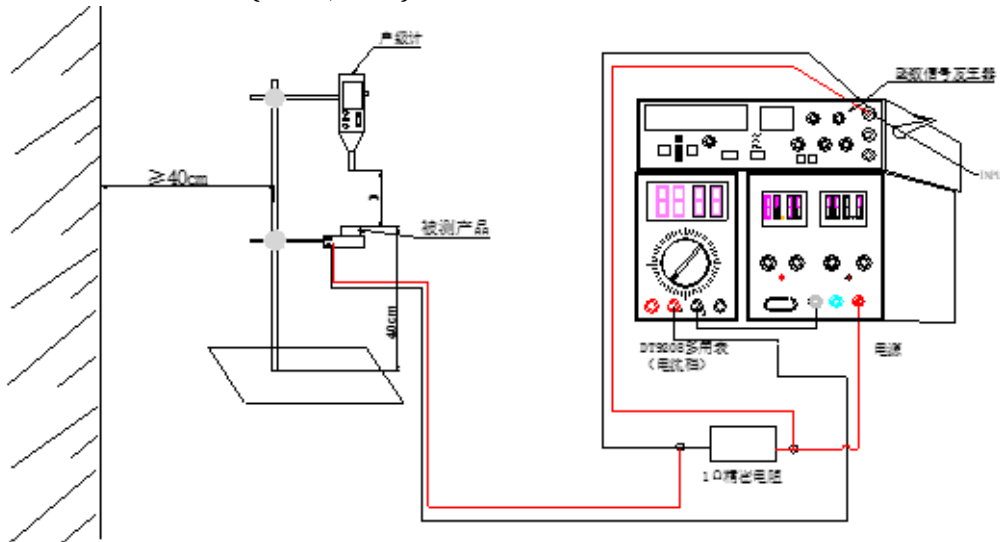
## Features:

- 12Vdc Electro-Mechanical SMD Indicator
- 2400Hz Resonant Frequency
- Reflow and Wash Allowed

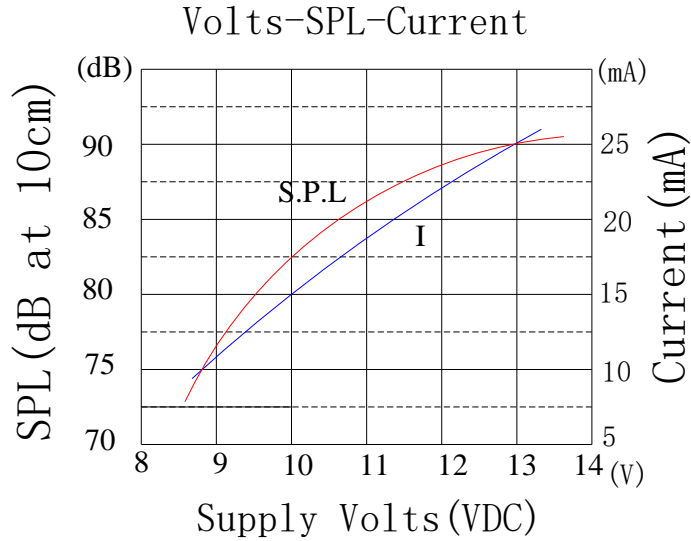
## Specifications

Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	8 - 15	VDC
Current Draw at Rated Voltage	30	mA
Minimum SPL @ 10cm	85	dBA
Resonant Frequency	2400 ± 300	Hz
Tone or Pulse Rate	Continuous Tone	-
Housing Material	PA46	-
Terminal Material	Sn plated Brass	-
Weight	5	Grams
Acceptable Soldering Methods	Hand Solder, Reflow Solder	See following pages for soldering information
Environmental Compliances	ROHS/REACH	-
Moisture Sensitivity Level (MSL)	Level 2	-
Storage Temperature	-40 to 85	°C
Operating Temperature	-40 to 85	°C

## Measurement Method (12Vdc, 10cm)



## SPL vs Voltage Curve

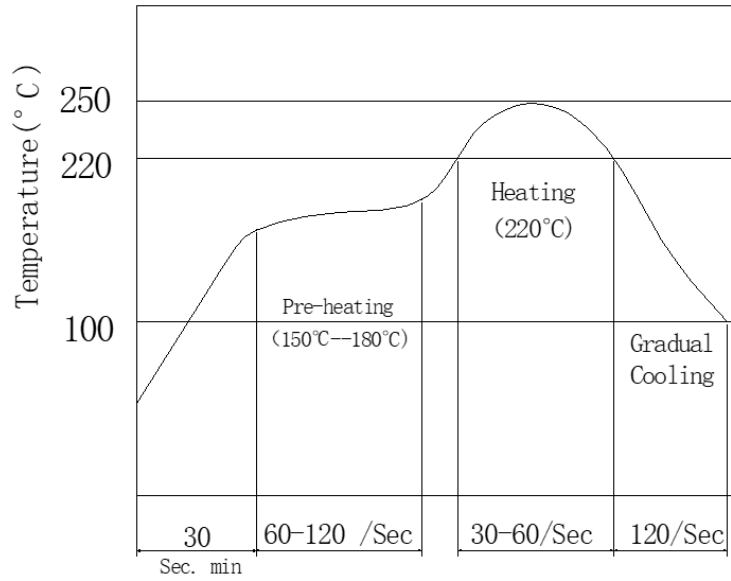


## Reliability Testing

Type of Test	Test Specifications
Storage High Temperature Test	Storage in $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Storage Low Temperature Test	Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Humidity Test	Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Temperature Cycle Testing	<p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
Vibration Test	<p>Amplitude: 1.5mm Time: 1min/axis</p> <p>Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).</p>
Drop Test	Free drop a unit from the height 100cm to the surface of 10mm thick board, three directions(X,Y,Z).
Solderability Test	Soldering temp.: $260 \pm 5^{\circ}\text{C}$ Heat applying time: $3 \pm 0.5\text{sec}$ .

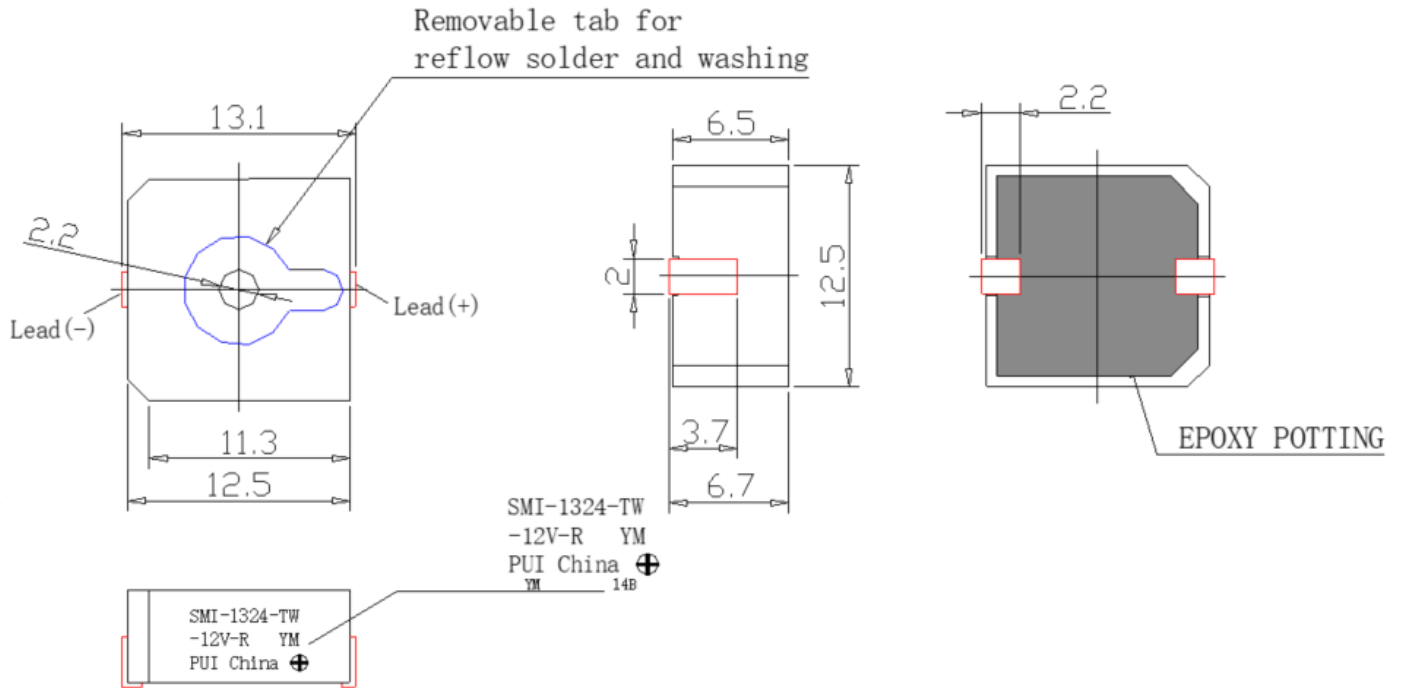
**After tests, SPL shall be within  $\pm 5\text{dB}$**

## Recommended Reflow Profile

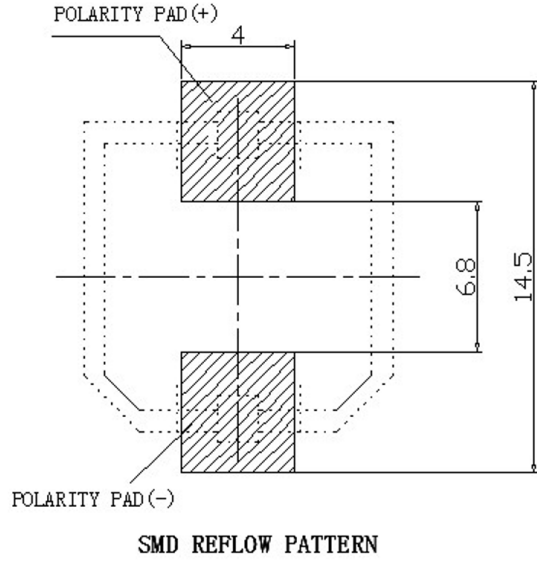


**\*Manual Solder - Iron Temp 360C, Solder Time 3 seconds or less.**

## Dimensions

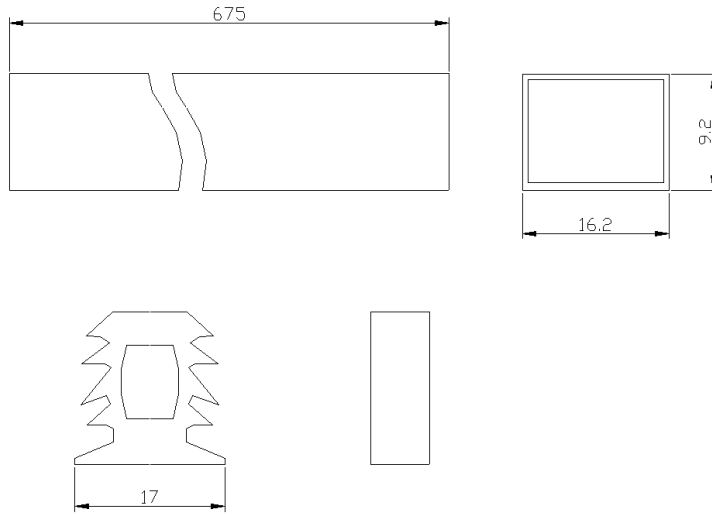


## Recommended Land Pattern

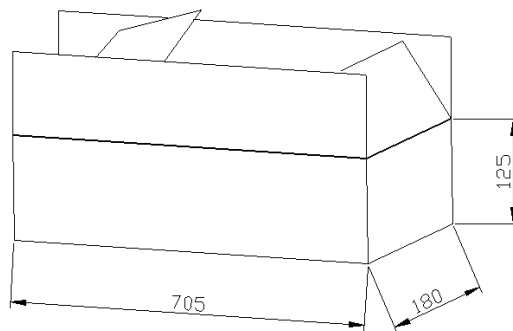


## Packaging

50pcs per stick tube



5k pcs master carton



### Specifications Revisions

Revision	Description	Date	Approved
-	Released from Engineering	10/13/2004	-
A	Updated Housing Material	04/19/2005	RW
B	Added ROHS Compliance	08/10/2005	-
C	Added Note 4	11/02/2005	BR
D	Revised Terminal Material	03/20/2006	BR
E	Revised to Inventor 3D Template	05/28/2010	BR
F	Revised Storage Temperature	02/27/2020	MV
G	Update Spec Format, Add details for Reliability, Packaging, Reflow etc., Revised Operating Temperature	08/02/2024	ML

Note:

- Unless otherwise specified:
  - All dimensions are in millimeters.
  - Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .
- Specifications subject to change or withdrawal without notice.
- This part is ROHS 2015/863/EU compliant.
- Max reflow temperature is 260C for 10 seconds or less.