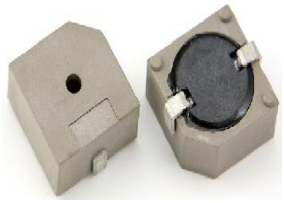


Data Sheet	SMI-1324-TW-5V-HT-R

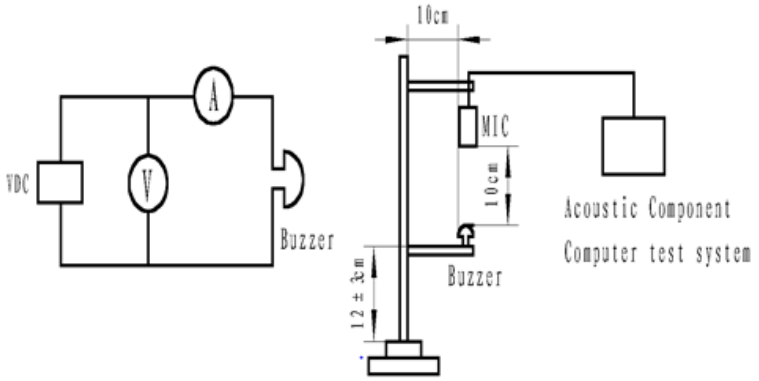
PUI Audio's **High-Temp** line of products is designed with ultra-wide operating temperatures. The **SMI-1324-TW-5V-HT-R** is built for high output at 2400 Hz in a small package.

- Low current draw of less than 30 mA at 5 VDC
- Minimum 85 dBA output with 5 VDC input
- Wide -40°C to +85°C operating temperature
- Reflow Allowed, Washing NOT Allowed

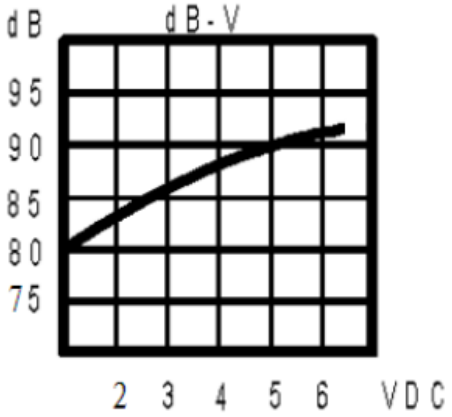
Specifications

Parameters	Values	Units
Rated Voltage	5	VDC
Operating Voltage Range	3 ~ 6.5	VDC
Current Draw at Rated Voltage	≤30(Max.)	mA
Minimum SPL @ 10cm	≥85	dBA
Resonant Frequency	2400 ± 300	Hz
Housing Material	PPS	-
Weight	2.2	Grams
Acceptable Soldering Methods	Hand Solder, Reflow Solder	See following pages for information
Moisture Sensitivity Level (MSL)	-	-
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +90	°C
Operating Temperature	-40 ~ +85	°C

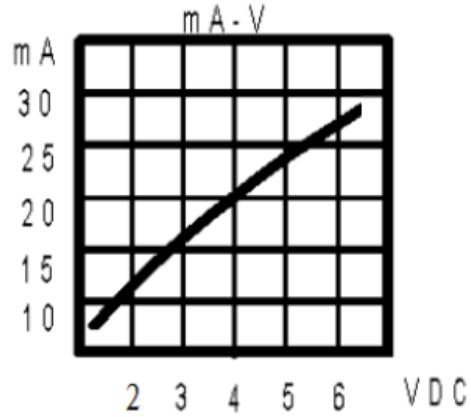
Measurement Method **(Power=5VDC, Distance=10cm)**



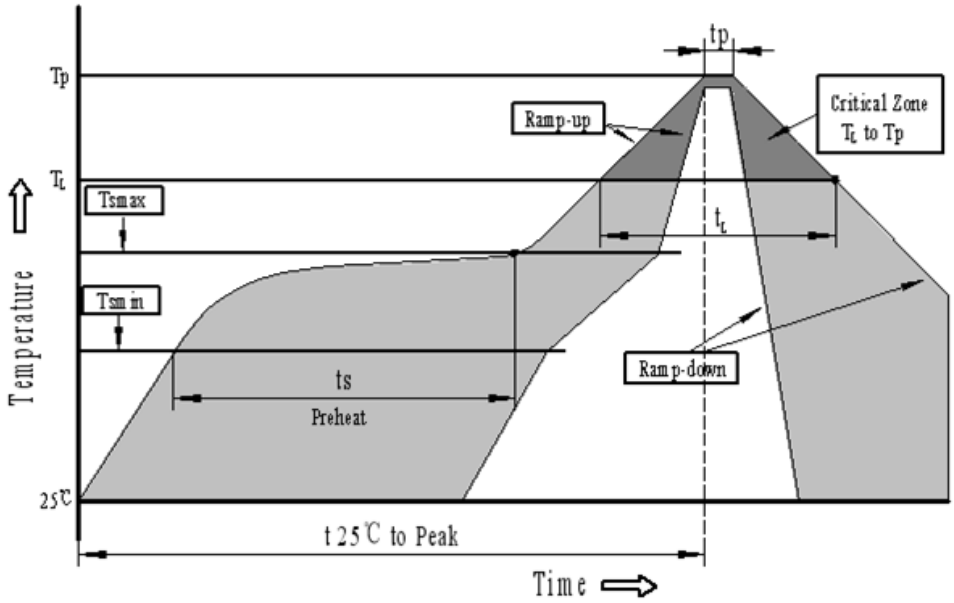
Typical SPL vs Input Voltage



Typical Current Draw vs Input Voltage



Recommended Reflow Soldering Procedure



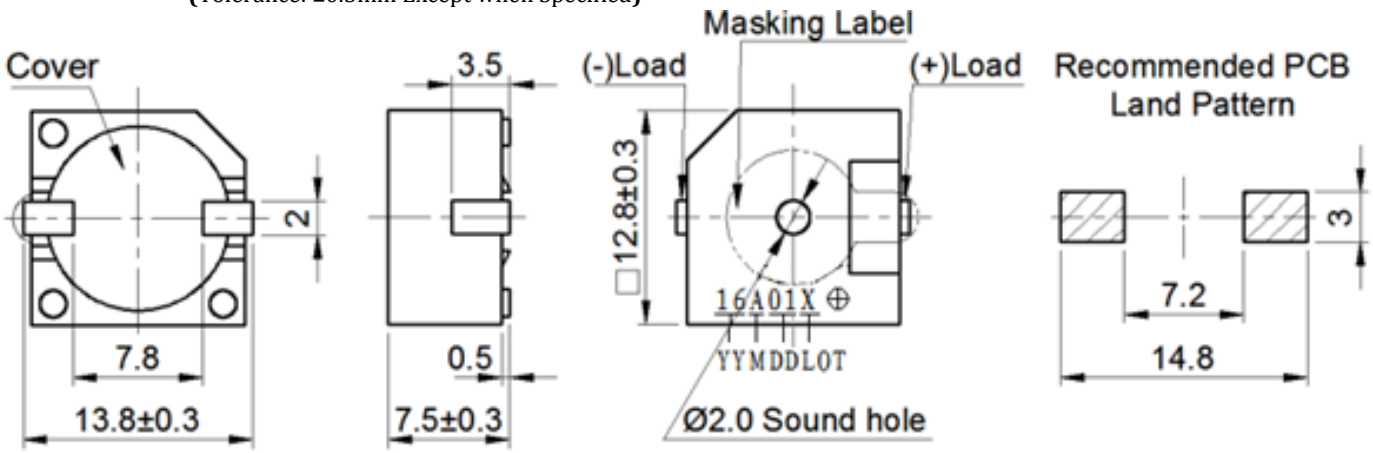
Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to Tp)	3℃/second max.
Preheat	
-Temperature Min.(Ts_{min})	150℃
-Temperature Min.(Ts_{max})	200℃
-Temperature Min.(ts)	60～180 seconds
Ts_{max} to T_L	
-Ramp-up Rate	3℃/second max.
Time maintained above:	
- Temperature(T_L)	217℃
-Time(T_L)	60～150 seconds
Peak temperature(Tp)	245℃+0/-5℃
Time within 5℃of actual Peak temperature (tp)	6 seconds max.
Ramp-down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8 minutes max.

Reliability Testing

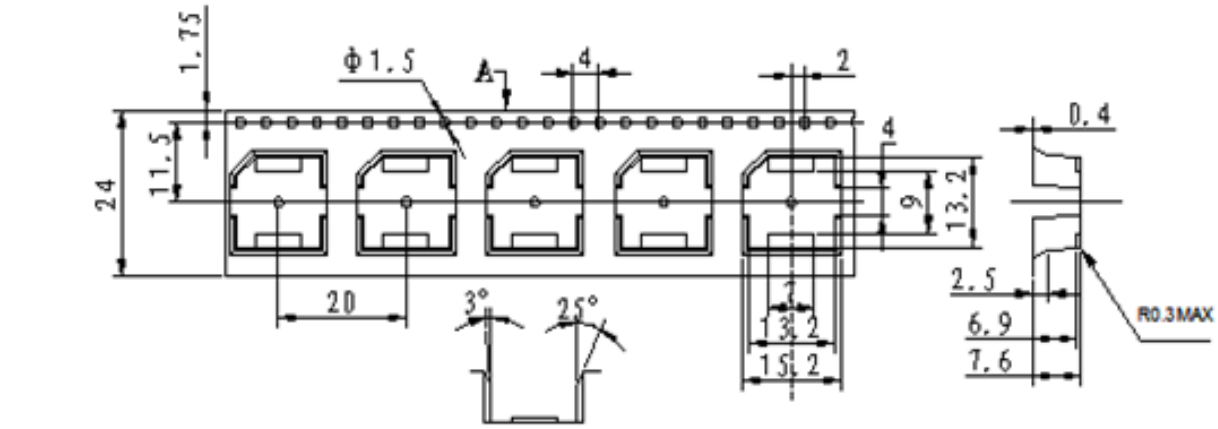
Type of Test	Test Specifications
High Temperature Test	The part shall be capable of withstanding a storage temperature of +90°C for 120 hours
Low Temperature Test	The part shall be capable of withstanding a storage temperature of -40°C for 120 hours
Humidity Test	40±2°C, 90～95% RH, 120 hours
Temperature Cycle Testing	Total 5 cycles, 1 cycle containing: -40±2°C, 30 minutes 20±5°C, 15 minutes 90±2°C, 30 minutes 20±5°C, 15 minutes
Vibration Test	The part shall be subjected to a vibration cycle of 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52 mm (9.3g). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours
Shock Test	Part shall be measured after being applied a shock (980m/s^2) for each three mutually perpendicular directions to each of 3 times by half sine wave.
Drop Test	Drop part from 700mm height onto the surface of 10mm thick wooden board. 2 directions-upper and side of the part are to be applied.

After the test the part shall meet specifications without any degradation in appearance and performance except SPL shall be initial value±10dB.

Dimensions (Tolerance: ±0.5mm Except when Specified)

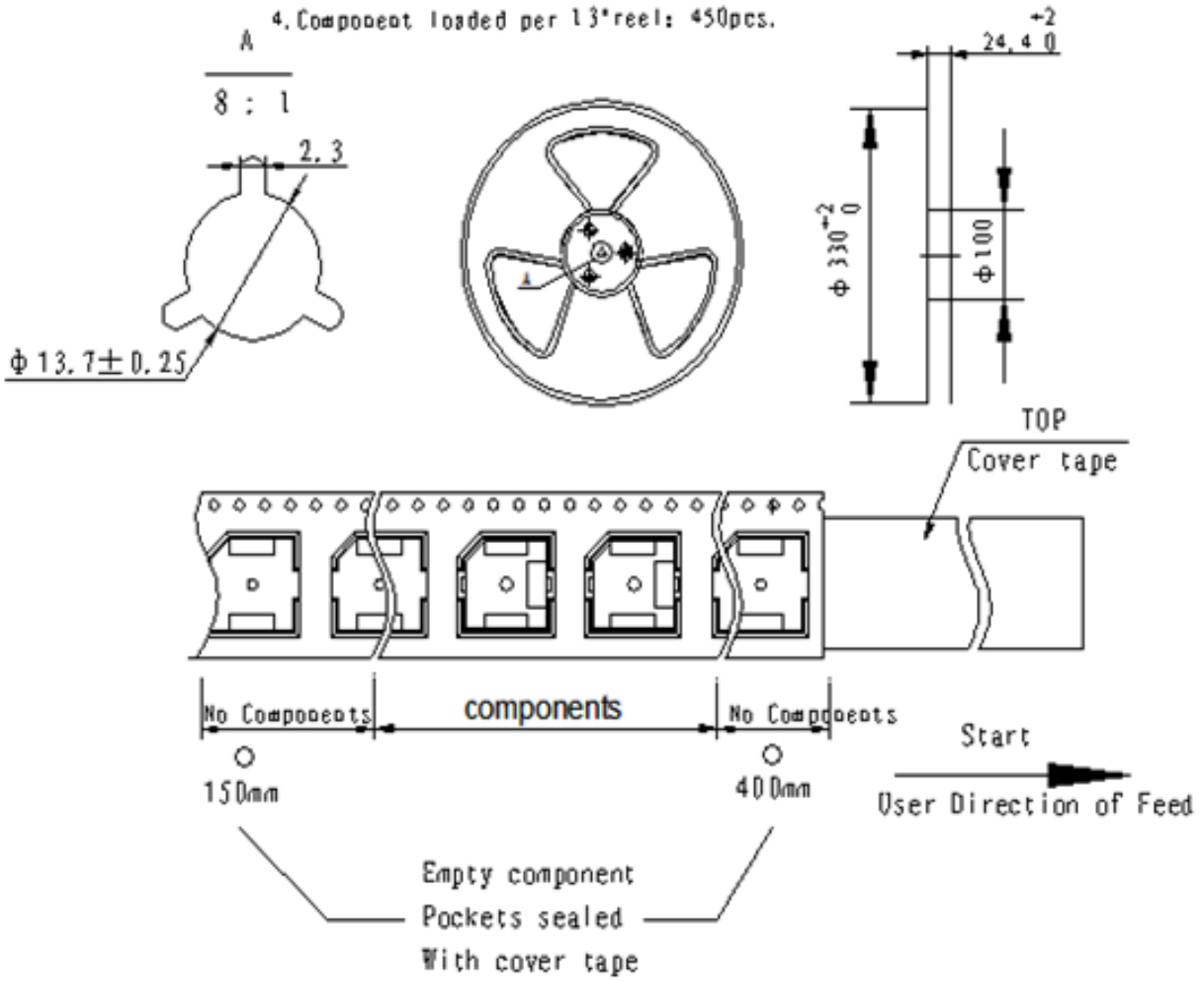


Packaging

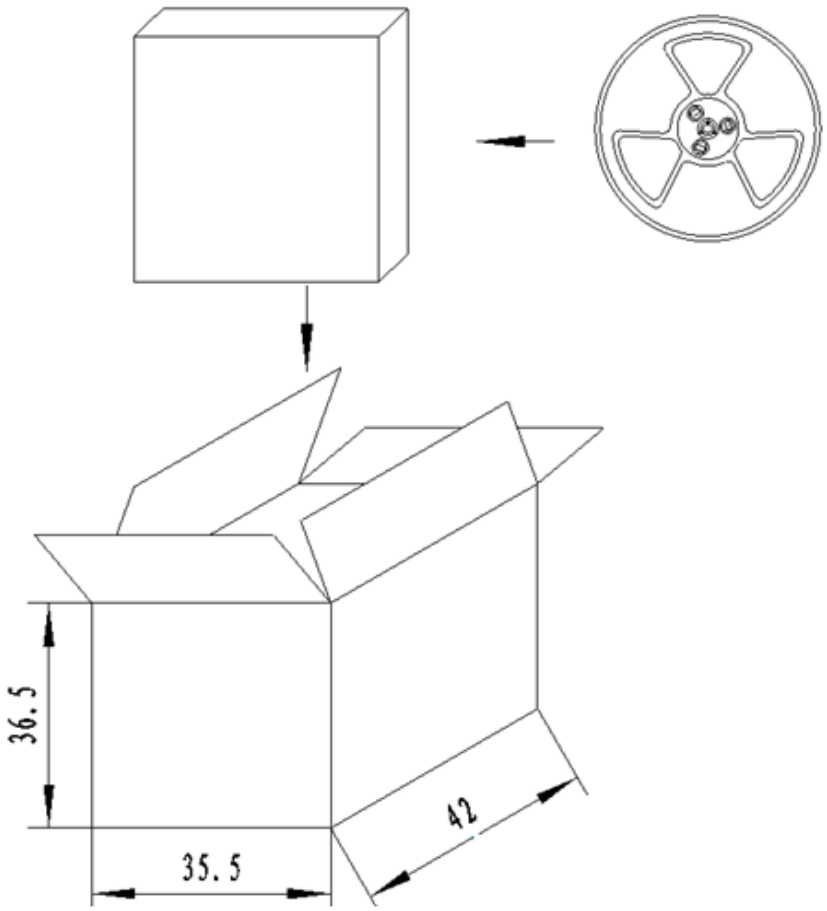


NOTE:

1. 10 sprocket hole pitch cumulative tolerance +/-0.2mm.
2. All dimensions meet EIA-481-D requirements.
3. Thickness: 0.4+/-0.05mm.
4. Component loaded per 13"reel: 450pcs.



Packaging Cont'd



NOTES:

1.450 PCS per box

2.Total 10 boxes per carton

3.Total 4500 PCS carton

Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	03/23/2020	-
B	Revised Company Information Footer	08/08/2024	ML

Note:

1. Unless otherwise specified:
   A. All dimensions are in millimeters.
   B. Default tolerances are ±0.5mm and angles are ±3°.
2. Specifications subject to change or withdrawal without notice.