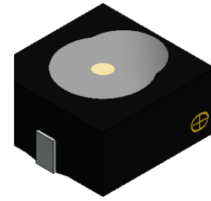




PUI audio



Data Sheet

SMI-1027-TW-12V-R

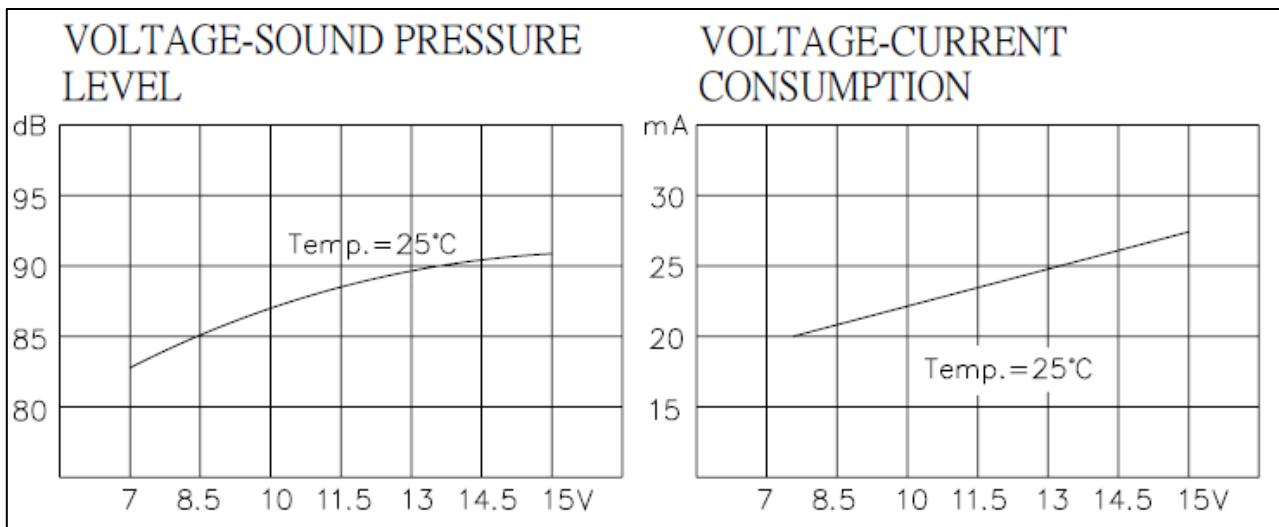
Features:

- 7 to 15 VDC voltage range with low 30 mA current draw
- 2700 Hz tone for peak perception above ambient noise
- Wide -40°C to +85°C operating temperature range

Specifications

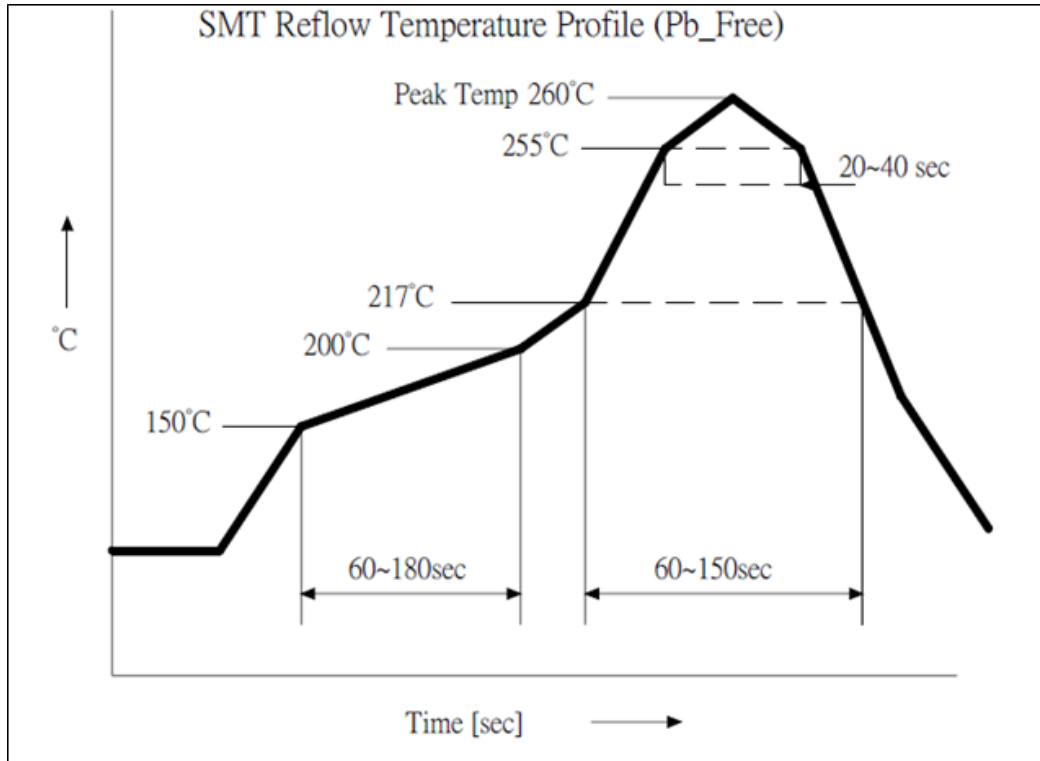
Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	7 ~ 15	VDC
Current Draw at Rated Voltage (Max)	30	mA
Minimum SPL @ 10cm	85	dba
Resonant Frequency	2700 ±200	Hz
Tone or Pulse Rate	Continuous Tone	-
Housing Material	PPS	-
Terminal Material	Sn Plated Brass	-
Weight	1.5	Grams
Moisture Sensitive Level (MSL)	2a	Less than or equal to 30C/60%RH, 4 weeks
Acceptable Soldering Methods	Reflow Solder	See page 2 for details
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40~+85	°C
Operating Temperature	-40~+85	°C

Typical SPL and Current Draw Based on VDC Input



Recommended Soldering Procedure

One Reflow Cycle Only

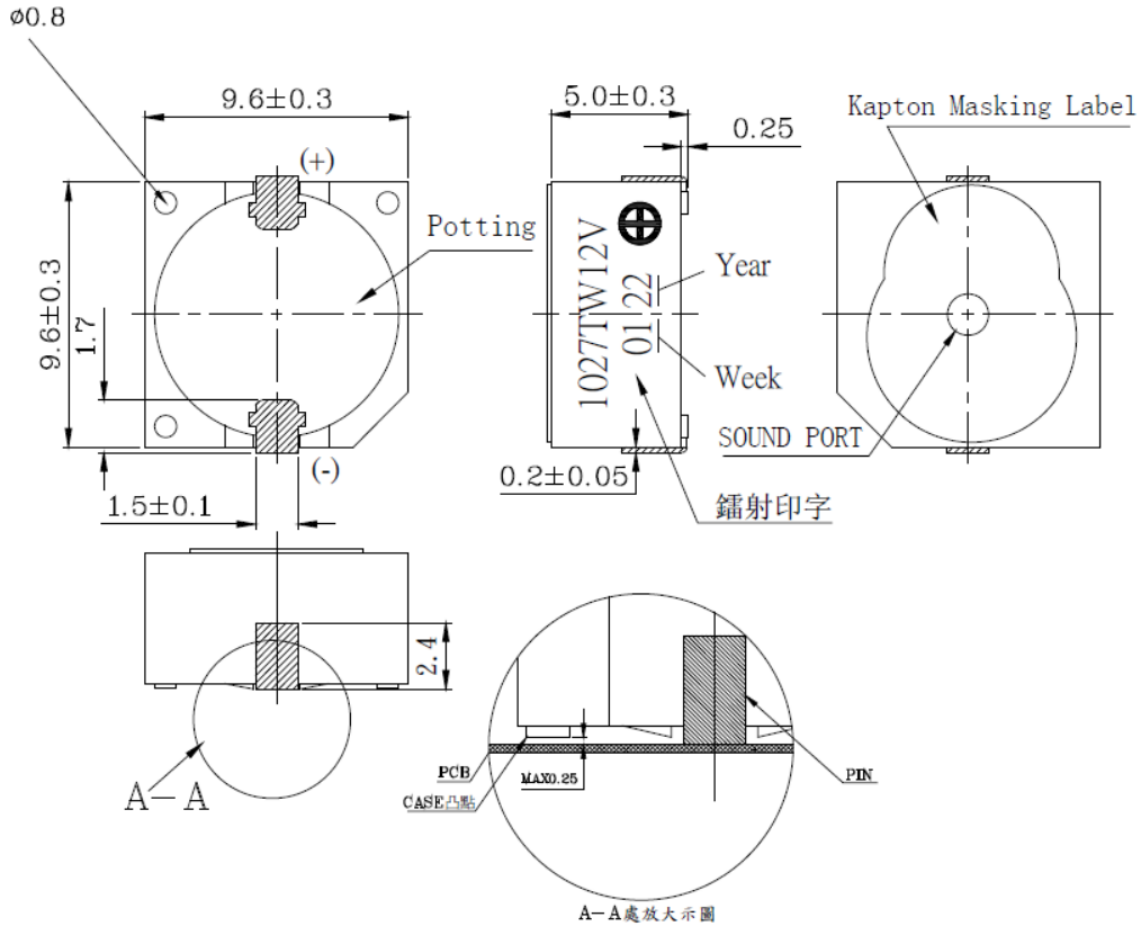


Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at +85°C
Low Temperature Test	96 hours at -40°C
Temperature Cycle and Humidity Test	<p>Ten 24-hour cycles consisting of the following:</p> <p>a, b : 90~98%RH c : 80~98%RH</p>
Operating Life Test	<ol style="list-style-type: none"> 1. Continuous life test - The part shall be subjected to 72 hours at +70°C with 12VDC applied. 2. Intermittent life test - A duty cycle of 1 minute on, 1 minute off, a minimum of 10000 times at room temp. (25±10°C) with 12.0VDC applied.

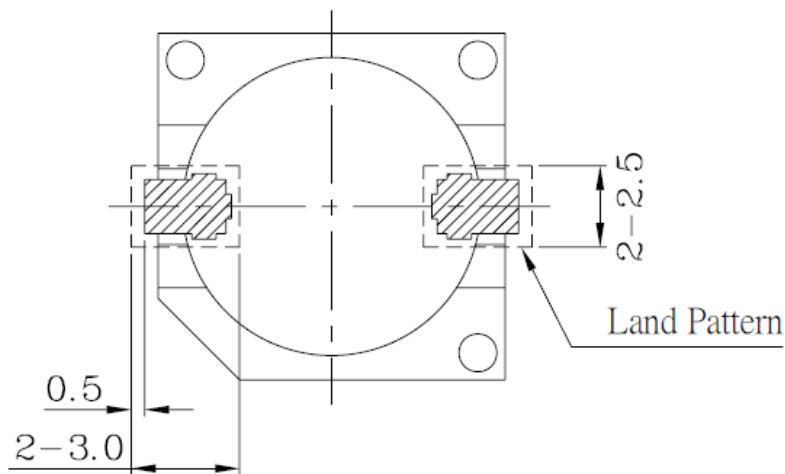
After testing, the part shall be without any degradation in appearance or performance except SPL. After 4 hours at +25°C, the SPL shall measure ±10 dBA compared to initial measurement.

Dimensions



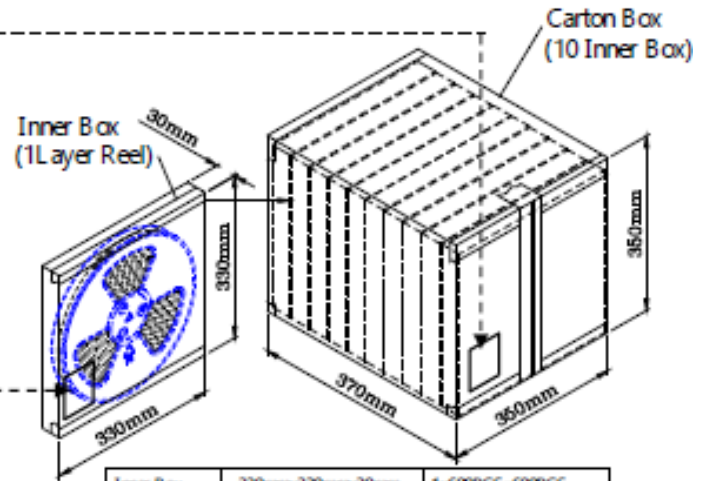
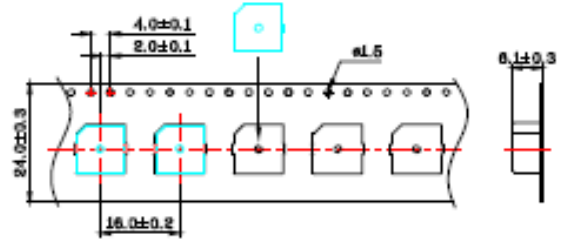
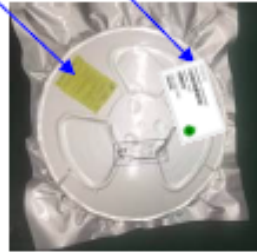
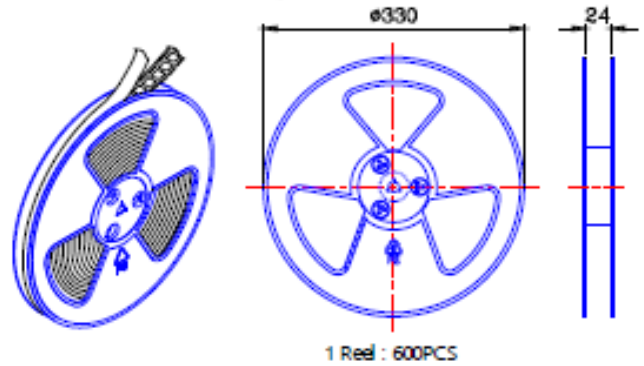
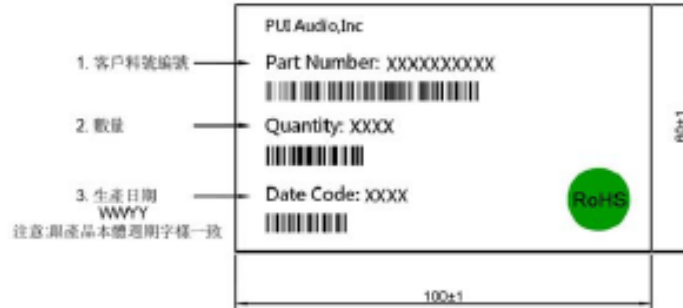
Tolerance $\pm 0.5\text{mm}$ unless otherwise specified

Suggested Land Pattern*



*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



Inner Box	330mmx330mmx30mm	1x600PCS-600PCS
Carton Box	350mmx350mmx370mm	10x600PCS-6,000PCS

防潮防靜電真空包裝袋 (MBB) / 內附乾燥劑 / HIC 卡/MSD
 標貼 (符合 MSL-2a) / 條碼標簽
 包裝袋外貼黃色 MSD 標貼 (符合 MSL-2a) / 條碼標簽
 包裝規範需符合 J-STD-033 國際標準定義要求

Specifications Revisions

Revision	Description	Date
-	Released from Engineering	11/11/2014
A	Added note to Reflow Solder Profile	6/27/2019
B	Updated Drawing	11/8/2022
C	Revised to add MSL 2a condition and packaging	6/6/2023

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.