

Data Sheet

SMI-1027-TW-12V-R

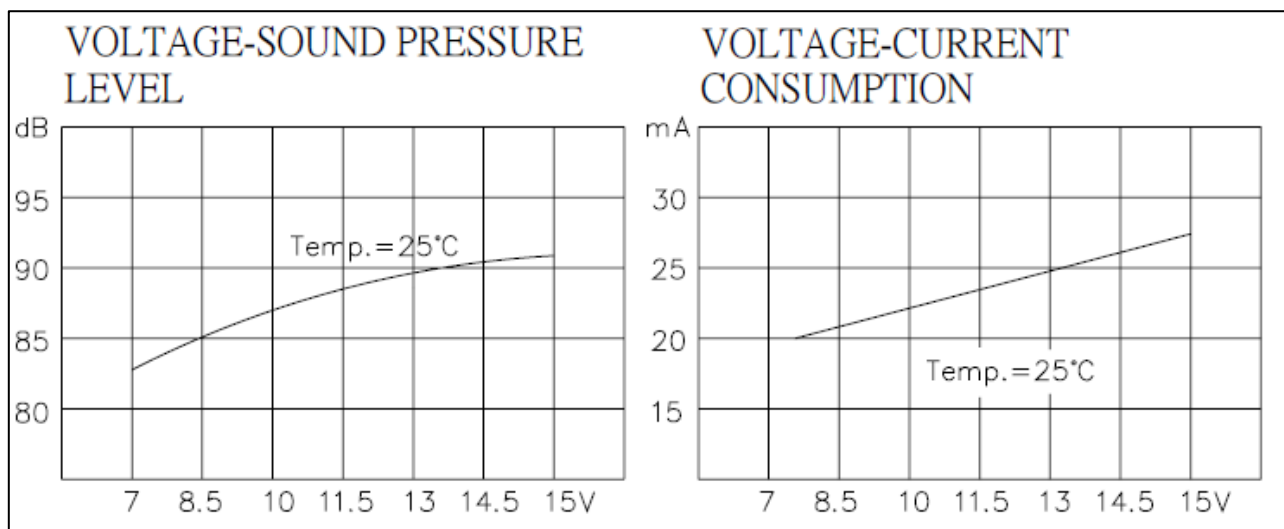
Features:

- 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

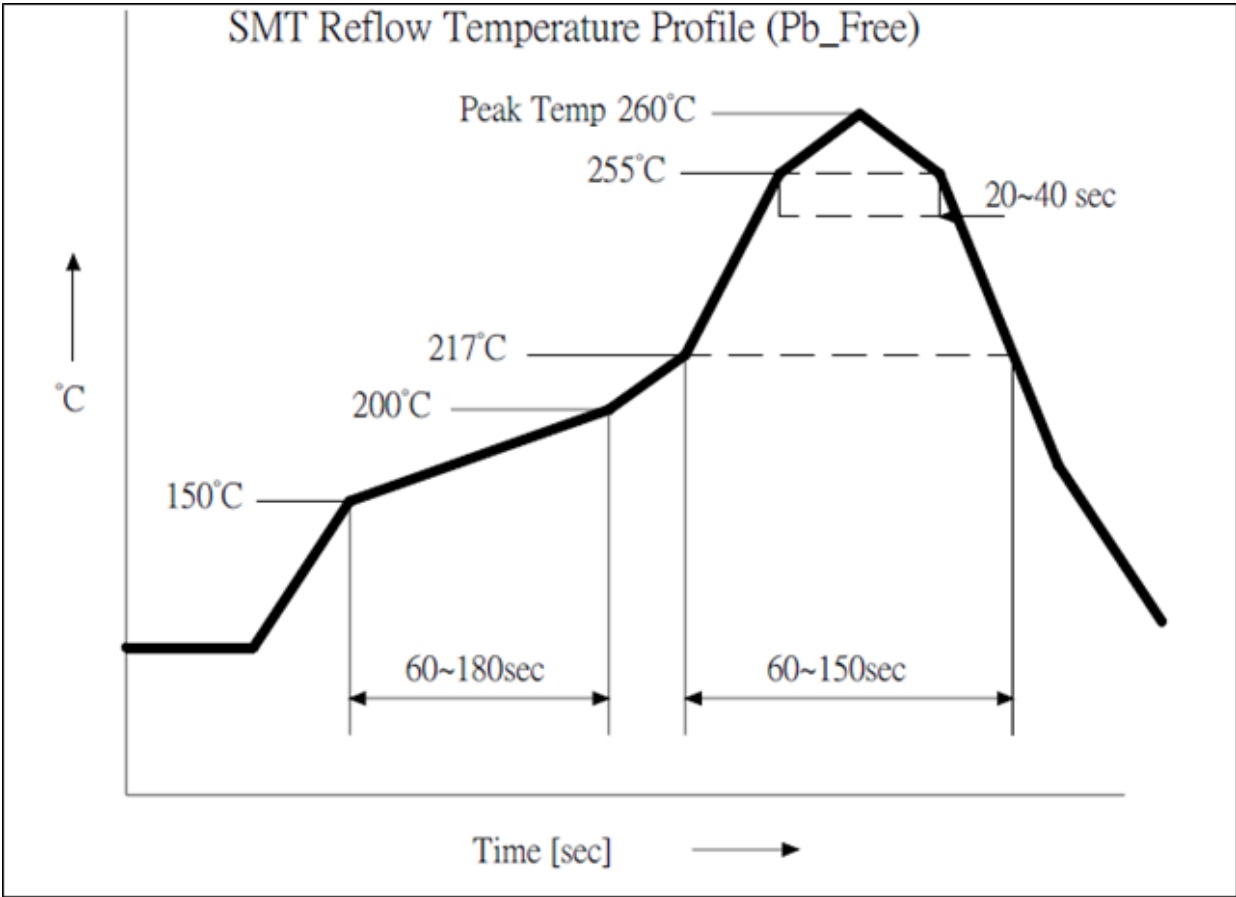
Specifications

| 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 ±300 | Hz |
| Tone or Pulse Rate | Continuous Tone | - |
| Housing Material | PPS | - |
| Terminal Material | Tin Plated Brass | - |
| Weight | 1.5 | Grams |
| Acceptable Soldering Methods | Reflow Solder | See page 2 for details |
| Environmental Compliances | RoHS | - |
| 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

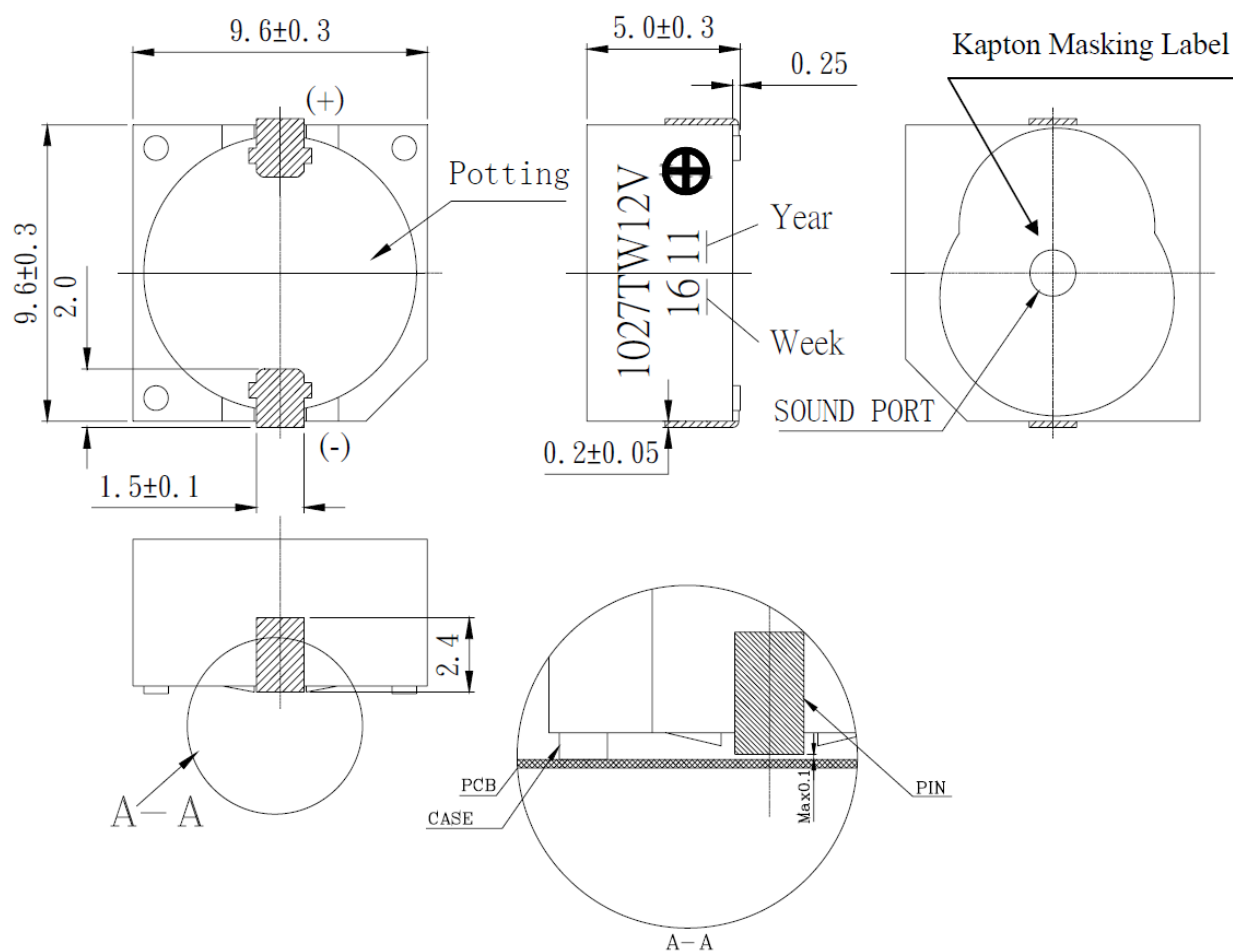


Reliability Testing

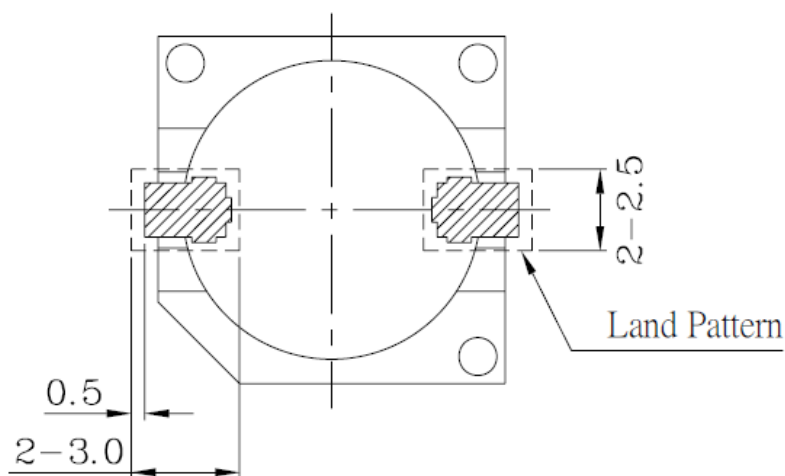
| Type of Test | Test Specifications |
|-------------------------------------|---|
| High Temperature Test | 96 hours at +85°C |
| Low Temperature Test | 96 hours at -40°C |
| Temperature Cycle and Humidity Test | Ten 24-hour cycles consisting of the following: <p>a,b : 90~98%RH c : 80~98%RH</p> |
| Operating Life Test | 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 denotes positive pad

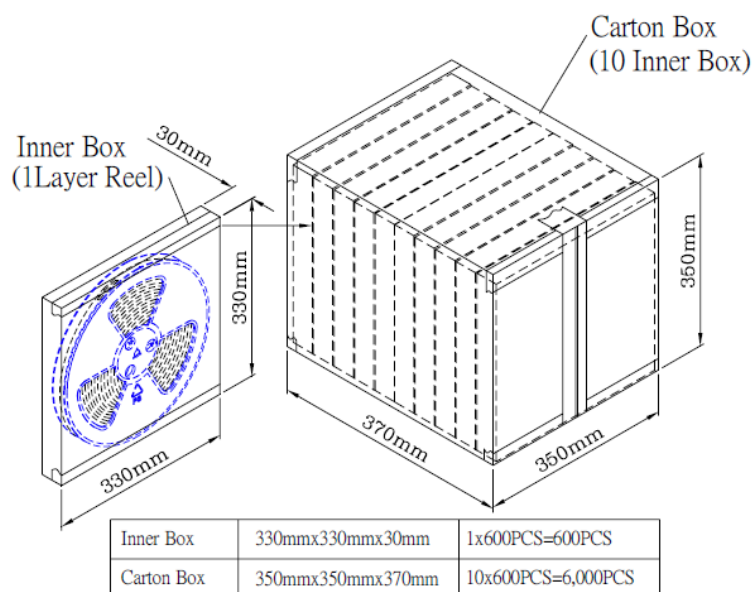
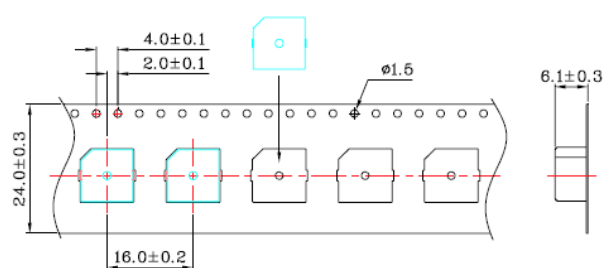
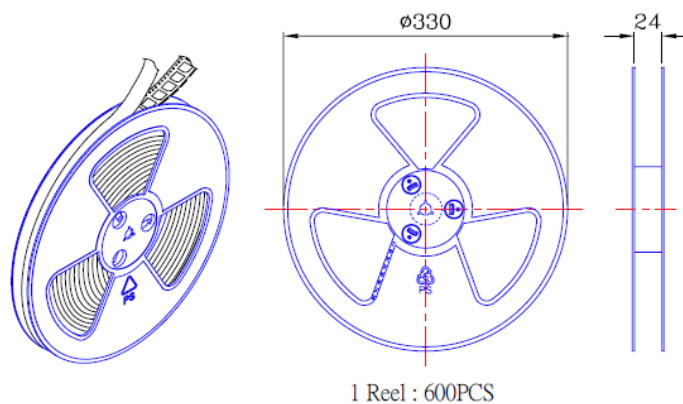


Suggested Land Pattern*



*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



Specifications Revisions

| Revision | Description | Date |
|-----------------|-------------------------------------|-------------|
| - | Released from Engineering | 11/11/2014 |
| A | Added note to Reflow Solder Profile | 6/27/2019 |

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.

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