



PUIaudio



Data Sheet

AI-1223-TWT-5V-7

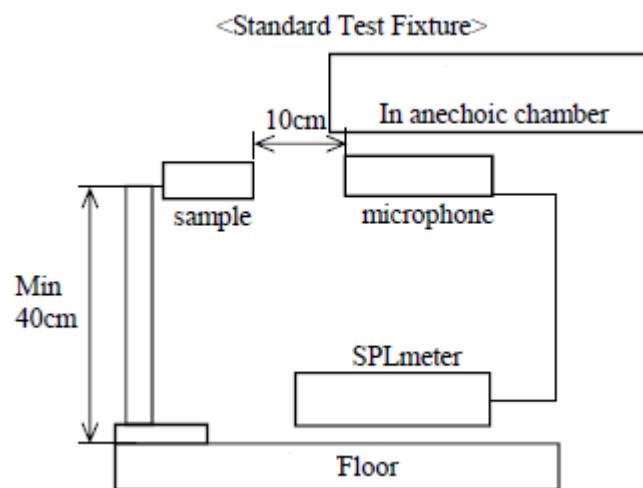
Features:

- 5 VDC rated voltage.
- 85 dB sound output at 10 cm
- Wide operating temperature range up to 85°C and as low as -40°C
- Wave Solder and Washing Allowed

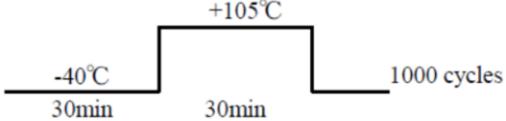
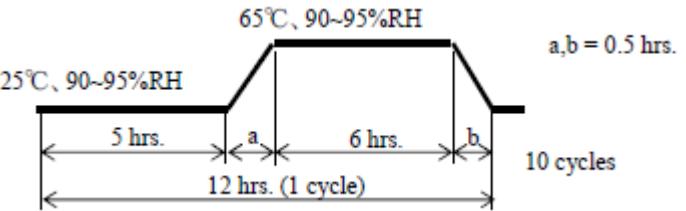
Specifications

Parameters	Values	Units
Rated Voltage	5	VDC
Operating Voltage Range	4 ~ 6.5	VDC
Current Draw at Rated Voltage	30 (Max.)	mA
Minimum SPL @ 10cm	85	dBA
Resonant Frequency	2300 ± 300	Hz
Tone or Pulse Rate	Continuous	-
Weight	2	Grams
Terminal Material	Sn Plated Copper Wire	-
Acceptable Soldering Methods	Hand Solder, Wave Solder	-
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ 105	°C
Operating Temperature	-40 ~ 85	°C

Measurement Method (Power=5Vdc, Distance=10cm)

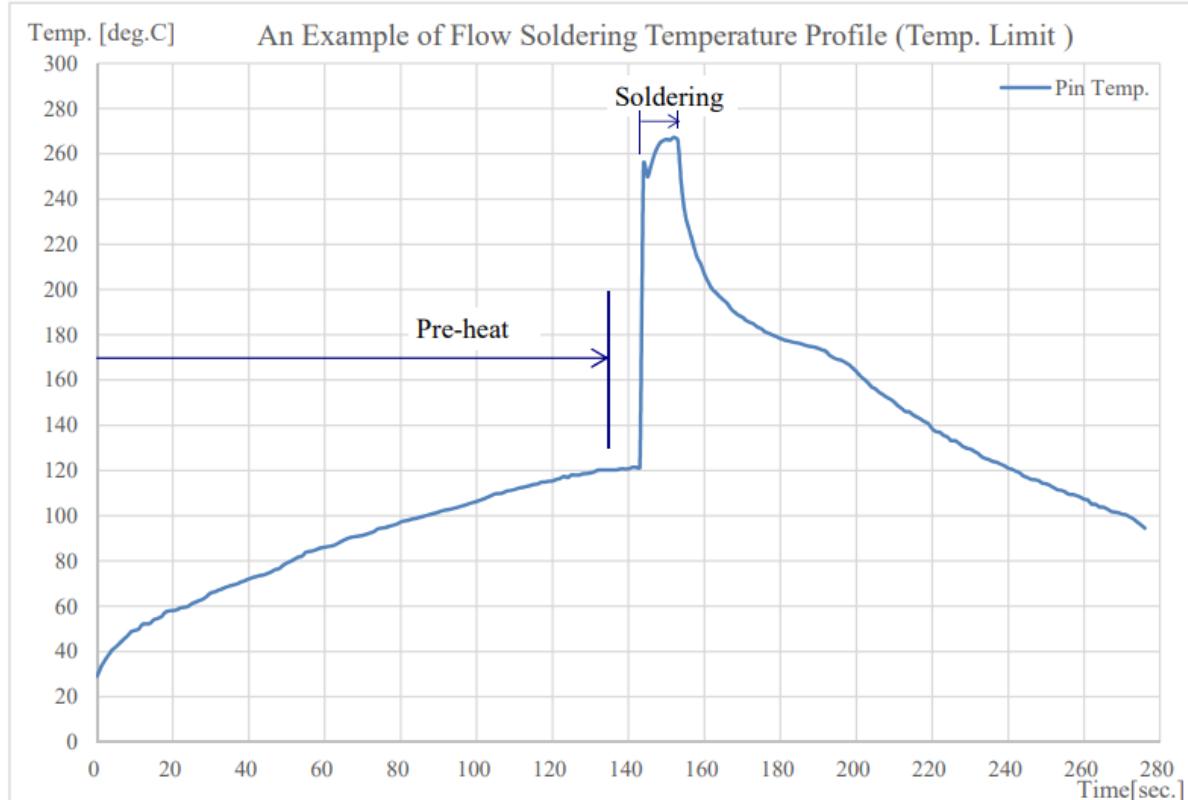


Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at 105°C
Low Temperature Test	96 hours at -40°C
Thermal Shock Test	
Humidity Cycle Testing	
Vibration Test	10-55-10 Hz Sine wave, Sweep 1 min., Amplitude 1.52 mm, Max 91 m/s ² , 3 directions (X, Y, Z), 2 hrs each, total 6 hrs
Drop Test	Free fall on wooden board ($t = 40\text{mm}$), height 70 cm, 3 directions (X, Y, Z), 1 time each, total 3 times.
Load Test	Continuous rumbling for 1000 hrs at 5 VDC

After each test, the SPL shall be 80 dB or higher at 2300 ± 400 hz.

Recommended Wave Soldering Profile



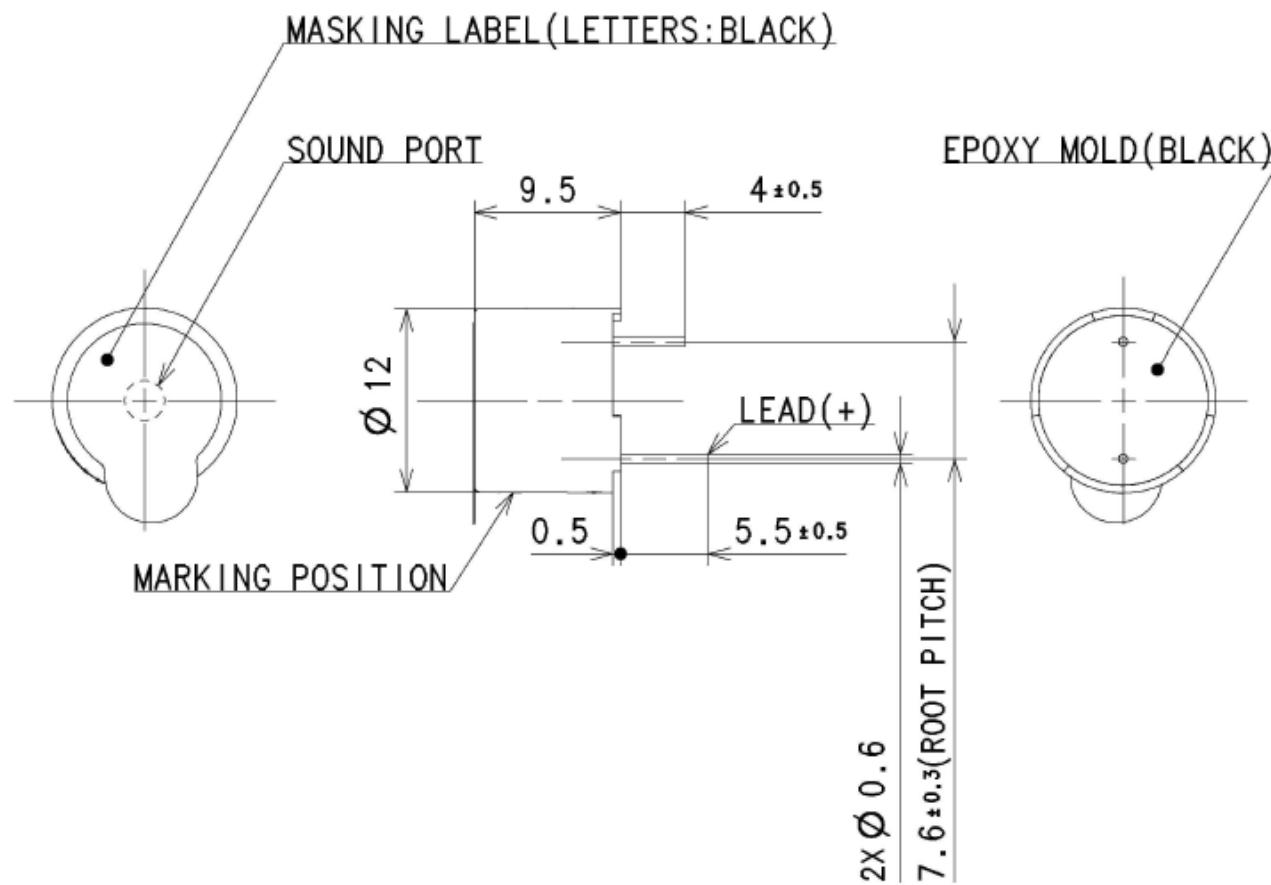
*Keep pin terminals at 120C or lower.

*Avoid quick pre-heating.

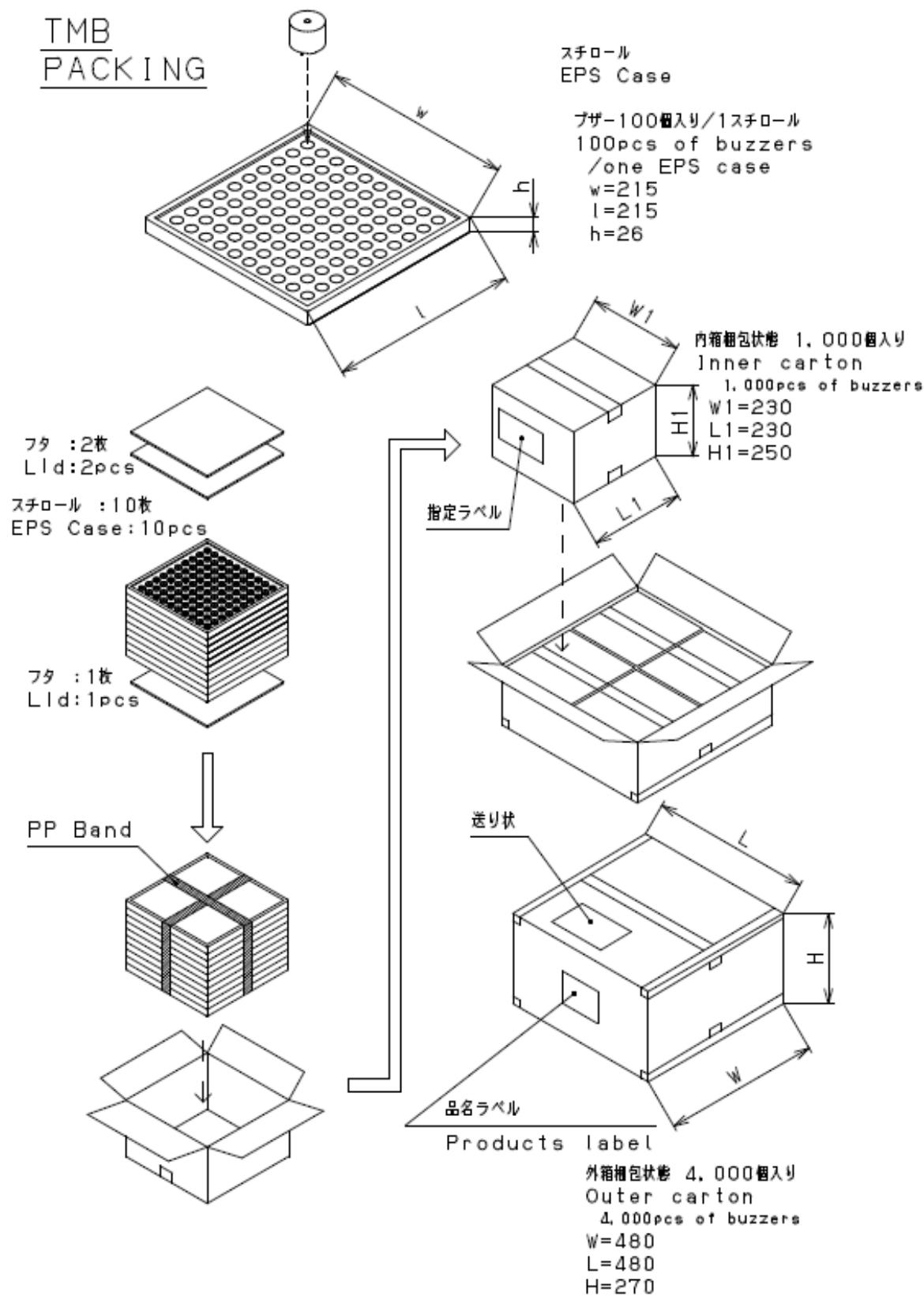
*Soldering time should be 5 sec. or less when the solder temp. is 260°C.

*Ensure the housing case will not be exposed to excessive heat. Keep the housing case at 120C or less.

Dimensions



Packaging



Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	09/14/2023	-
B	Revised Temperature and Terminal Material	10/10/2023	-
C	Add Wave Solder Profile Detail, Washing Allowed, Update Packaging and Reliability Detail, Revised SPL	06/27/2024	ML

Note:

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