



PUI audio



Data Sheet

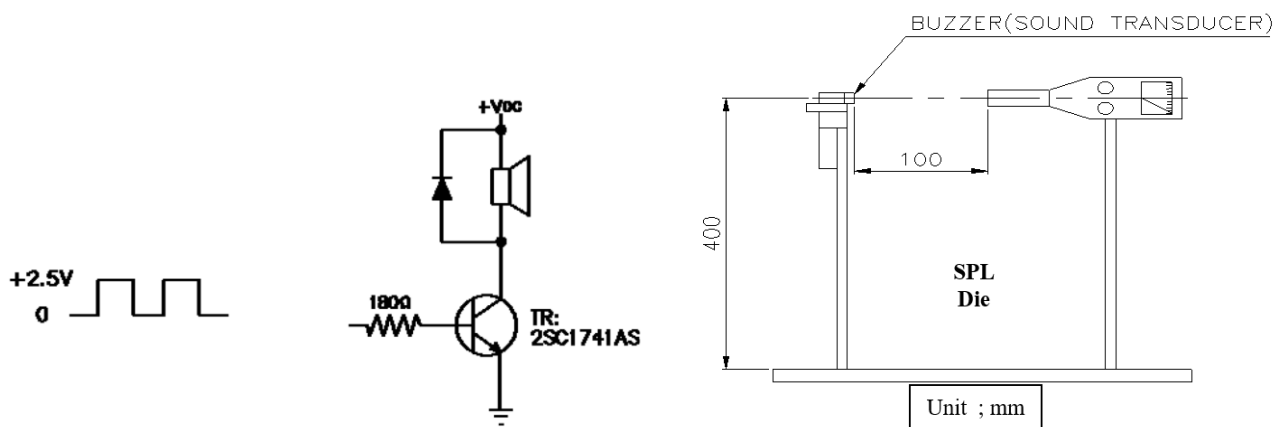
SMT-1220-TW-R-T/R

Specifications

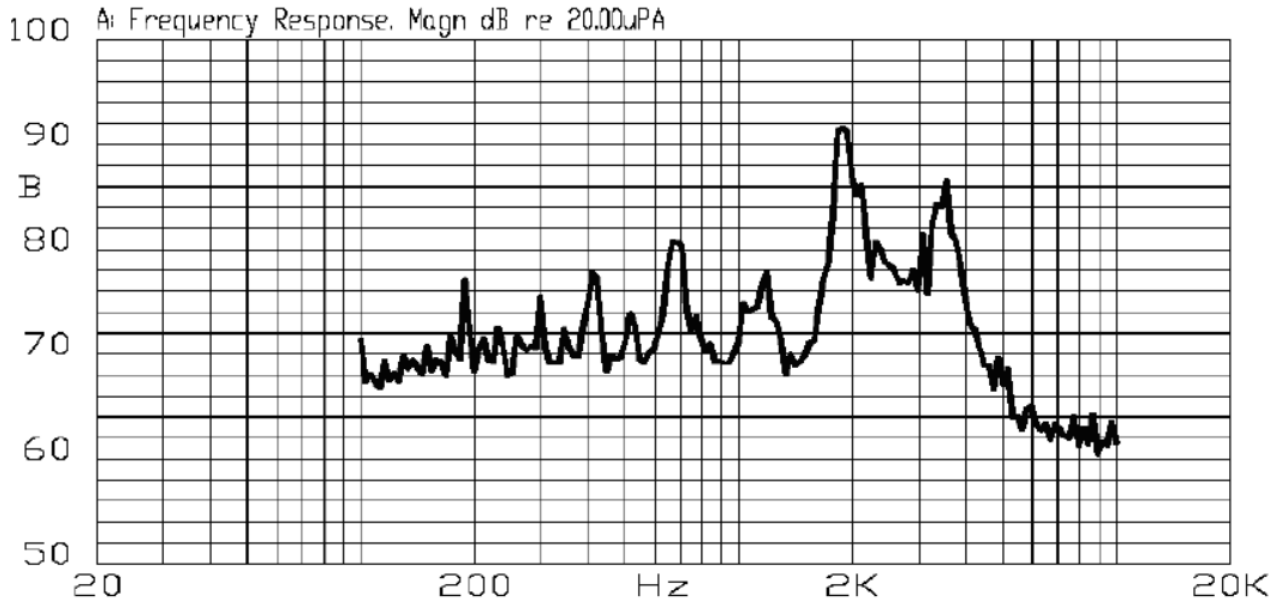
Parameters	Values	Units
Rated Voltage	3.0	Vpk
Operating Voltage Range	2 ~ 5	Vpk
Current Draw at Rated Voltage	35 max.	mA
Coil Resistance	47 ± 15%	Ohms
Minimum SPL @ 10cm	80	dBA
Resonant Frequency	2000 ± 200	Hz
Housing Material	PPS	-
Terminal Material	Au Plated Brass	-
Weight	1.6	Grams
Moisture Sensitivity Level (MSL)	2	-
Acceptable Soldering Methods	Reflow/Manual	See Details
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-40 ~ +85	°C

Measurement Method (Temperature: 25±3°C; Relative Humidity: 60% ~ 70%)

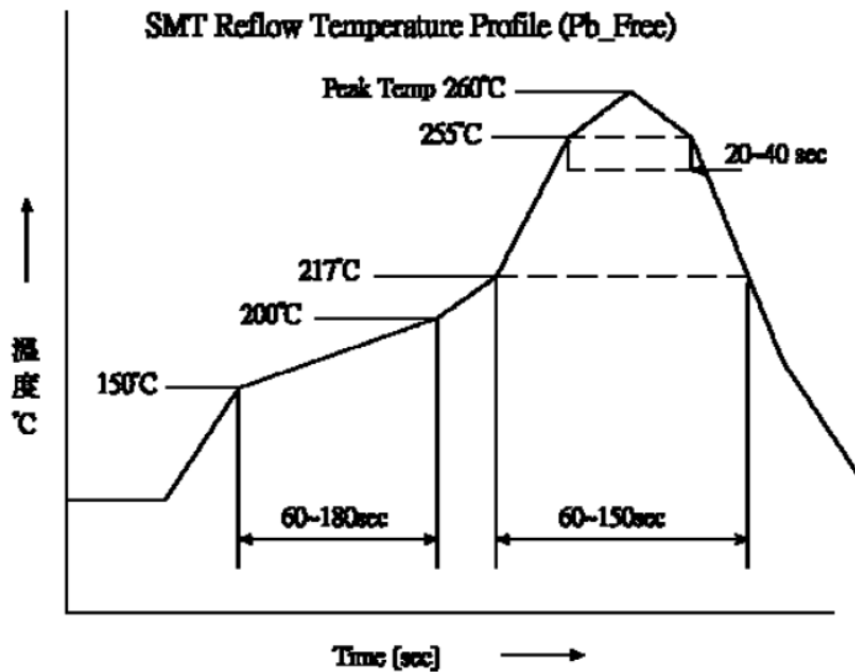
Standard Test Fixture (Distance: 10cm, 3Vpk, 2000Hz square wave)



Typical Frequency Response



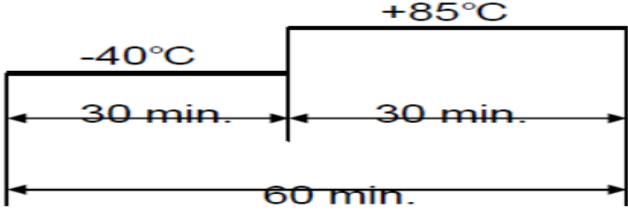
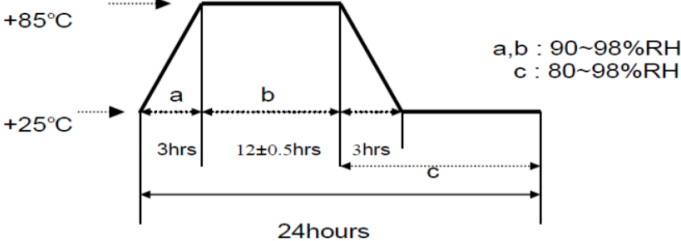
Recommended Reflow Profile



*Manual Solder - Iron Temp 350C and solder time 2-3sec per terminal.

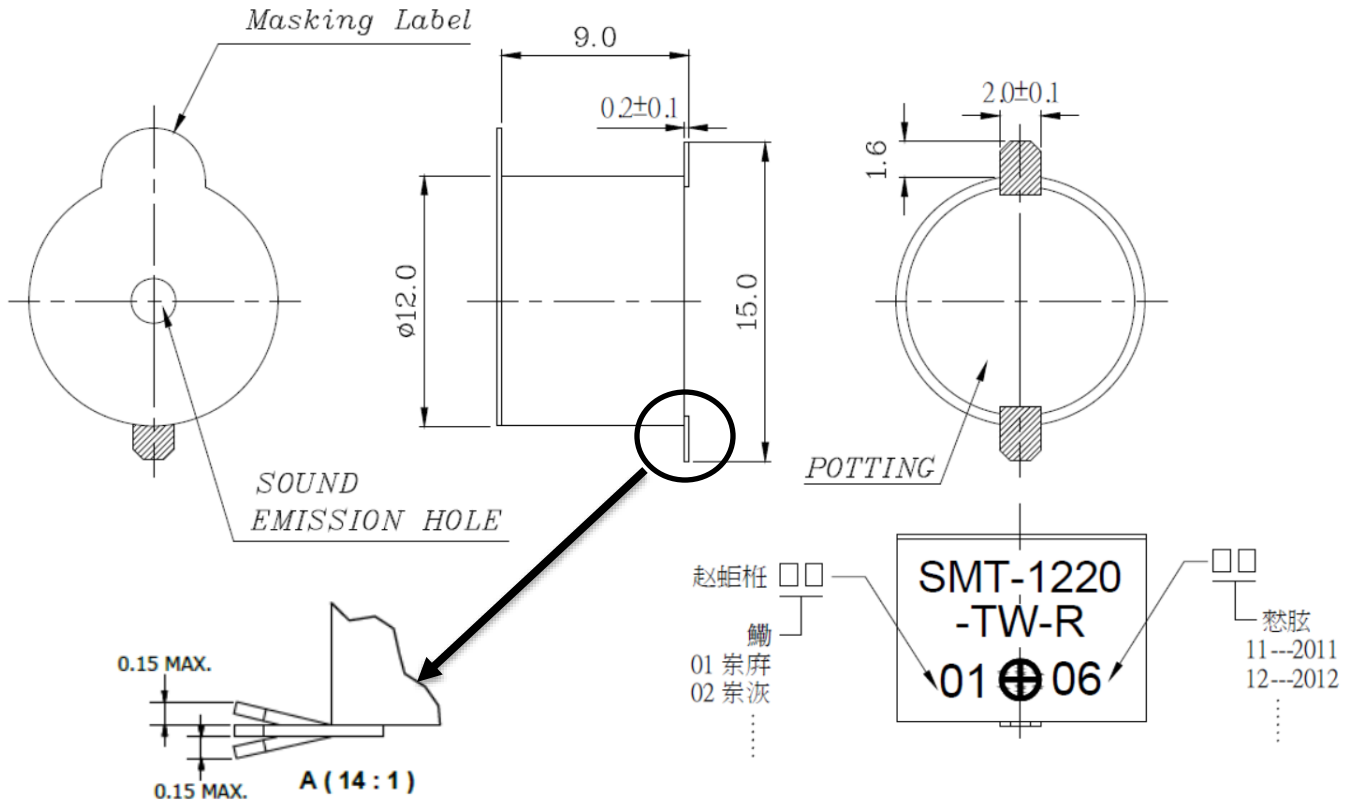
*Washing is allowed.

Reliability Testing

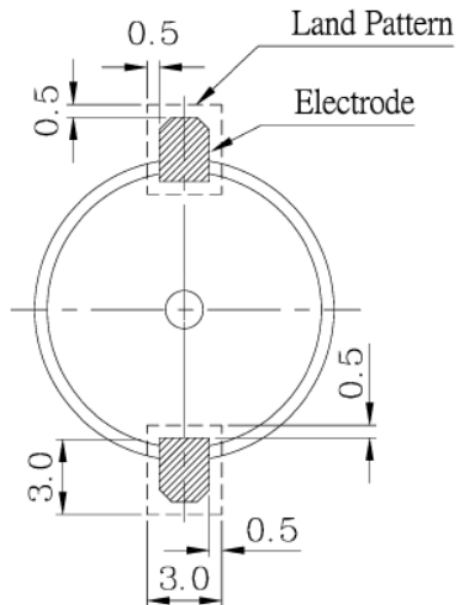
Type of Test	Test Specifications
High Temperature Test	Store at 85C for 96hrs. Then rest at room temperature for 2hrs.
Low Temperature Test	Store at -40C for 96hrs. Then rest at room temperature for 2hrs.
Thermal Shock	Subjected to 10 cycles of the below cycle;  <p>The diagram shows a thermal shock cycle. It starts at -40°C for 30 minutes, then transitions to +85°C for 30 minutes. The total duration of one cycle is 60 minutes.</p>
Humidity Cycle Test	Subjected to 10 cycles of the below cycle;  <p>The diagram shows a humidity cycle test. It starts at +25°C for 3 hours (segment 'a'), then ramps up to +85°C for 12 ± 0.5 hours (segment 'b'), then ramps down to +25°C for 3 hours (segment 'c'). The total duration of one cycle is 24 hours. Humidity levels are specified as 90~98%RH for segments 'a' and 'b', and 80~98%RH for segment 'c'.</p>
Vibration Test	Part shall be exposed to vibration amplitude of 1.5mm with 10-55Hz band frequency to X,Y,Z direction for 2 hours.
Drop Test	Drop from height of 75cm onto 40mm thick wooden board, 3 times each in X,Y,Z direction. Total 9 times.

Part shall be within ± 10dB after testing.

Dimensions



Recommended Land Pattern



Packaging

Technical drawings of the reel and inner box are provided. The reel has an outer diameter of $\varnothing 330.00$ and a width of 16.125 ± 0.10 . The inner box is $340 \text{ m} \times 340 \text{ m} \times 33 \text{ m}$. The carton box is $350 \text{ m} \times 175 \text{ m} \times 355 \text{ m}$. Labels include a yellow 'Caution' label, a white 'PUI Audio, Inc.' label with part number, quantity, and date code, and a grey 'HIC 卡' (Humidity Indicator Card).

Inner Box	340m m x 340m m x 33m m	1x300PCS=300PCS
Carton Box	350m m x 175m m x 355m m	5x300PCS=1500PCS

鋁鉑 MBB 袋 (內附 HIC 卡 / 乾燥劑 / 條碼標籤 / MSD 標貼 符合 MSD-2;
 包裝袋外貼 條碼標籤 / MSD 標貼 符合 MSD-2)

Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	05/17/2006	
A	REVISED TO 3D TEMPLATE	11/07/2007	
B	ADDED DETAIL VIEW OF TERMINAL LAYOUT	08/10/2011	
C	Add packaging details for MSL-2	07/23/2023	M.L.

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.