



PUIaudio



Data Sheet

SMT-0825-S-2-R

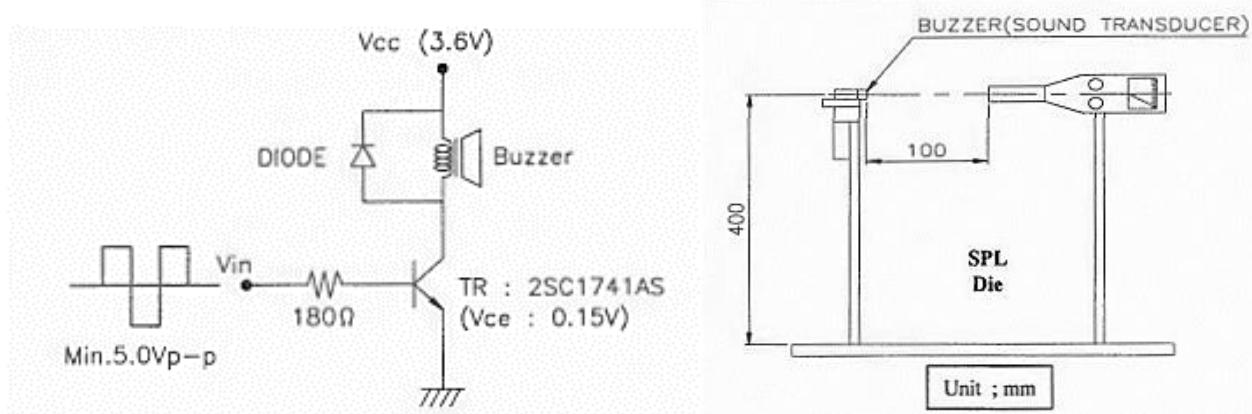
Features

- Side-firing electromechanical transducer designed for 2.5 to 4.5 Vp-p
- Small 8.5 x 8.5mm footprint and 4mm height for thin, modern devices
- Designed for reflow soldering using a lead-free profile.

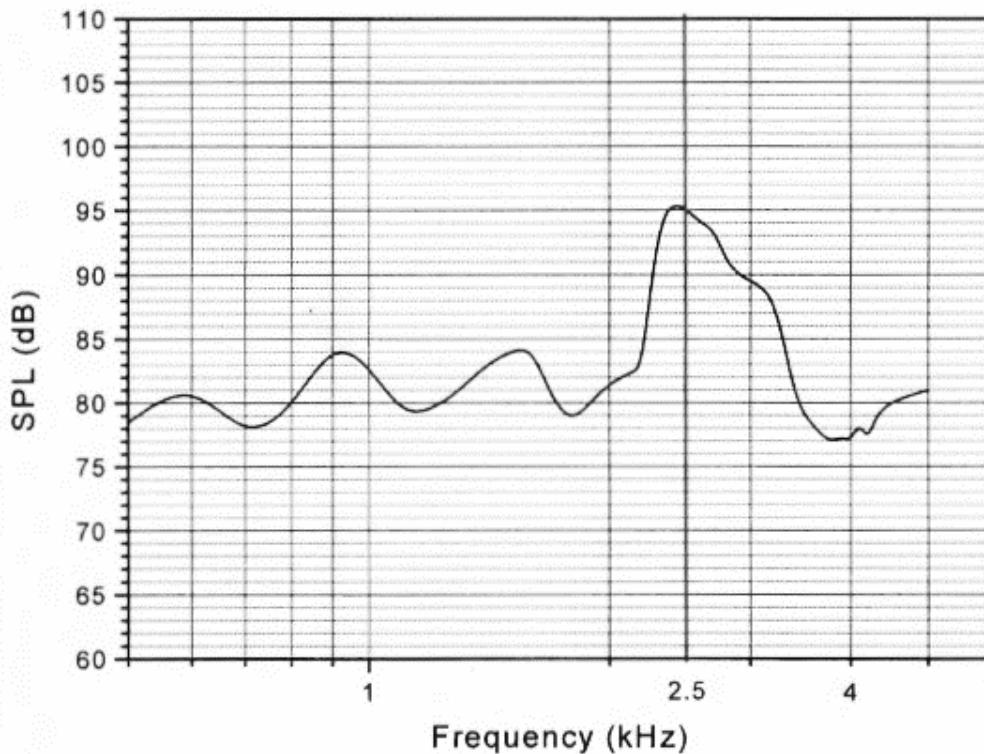
Specifications

Parameters	Values	Units
Rated Voltage	3.6	V0-pk
Operating Voltage Range	2.5 ~ 4.5	V0-pk
Current Draw at Rated Voltage	90 (Max.)	mA
Coil Resistance	15 ± 3	Ohms
Minimum SPL @ 10cm	87	dBA
Resonant Frequency	2500 ± 500	Hz
Housing Material	LCP	-
Terminal Material	Sn Plated Phosphor bronze	-
Weight	0.45	Grams
Acceptable Soldering Methods	Reflow Solder	See following pages
Environmental Compliances	ROHS/REACH	-
Moisture Sensitivity Level	2	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-30 ~ +70	°C

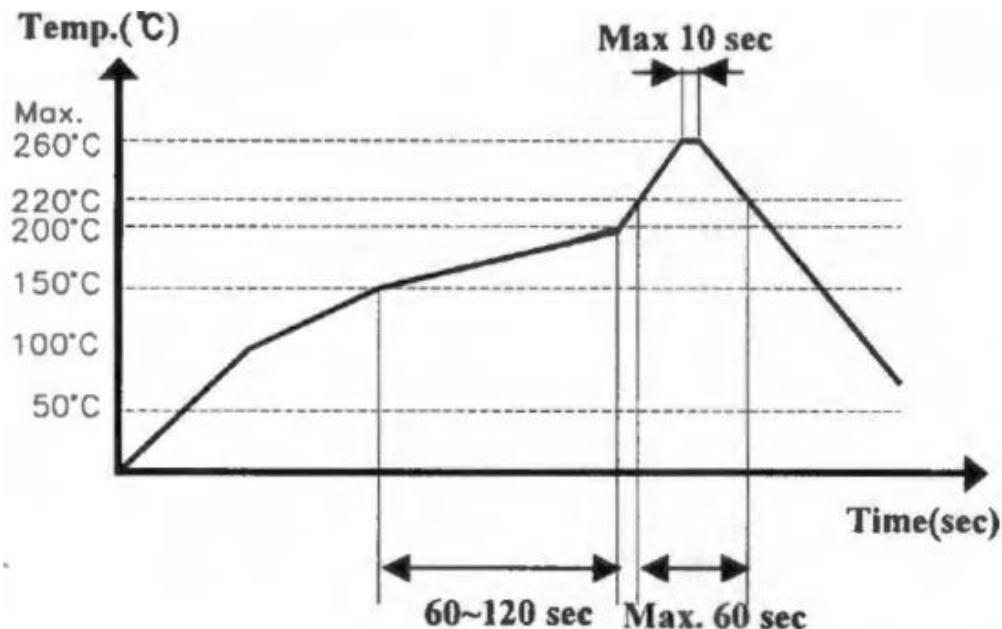
Measurement Method



Typical Frequency Response (3.6Vpk square wave, 10cm)



Recommended Soldering Procedure



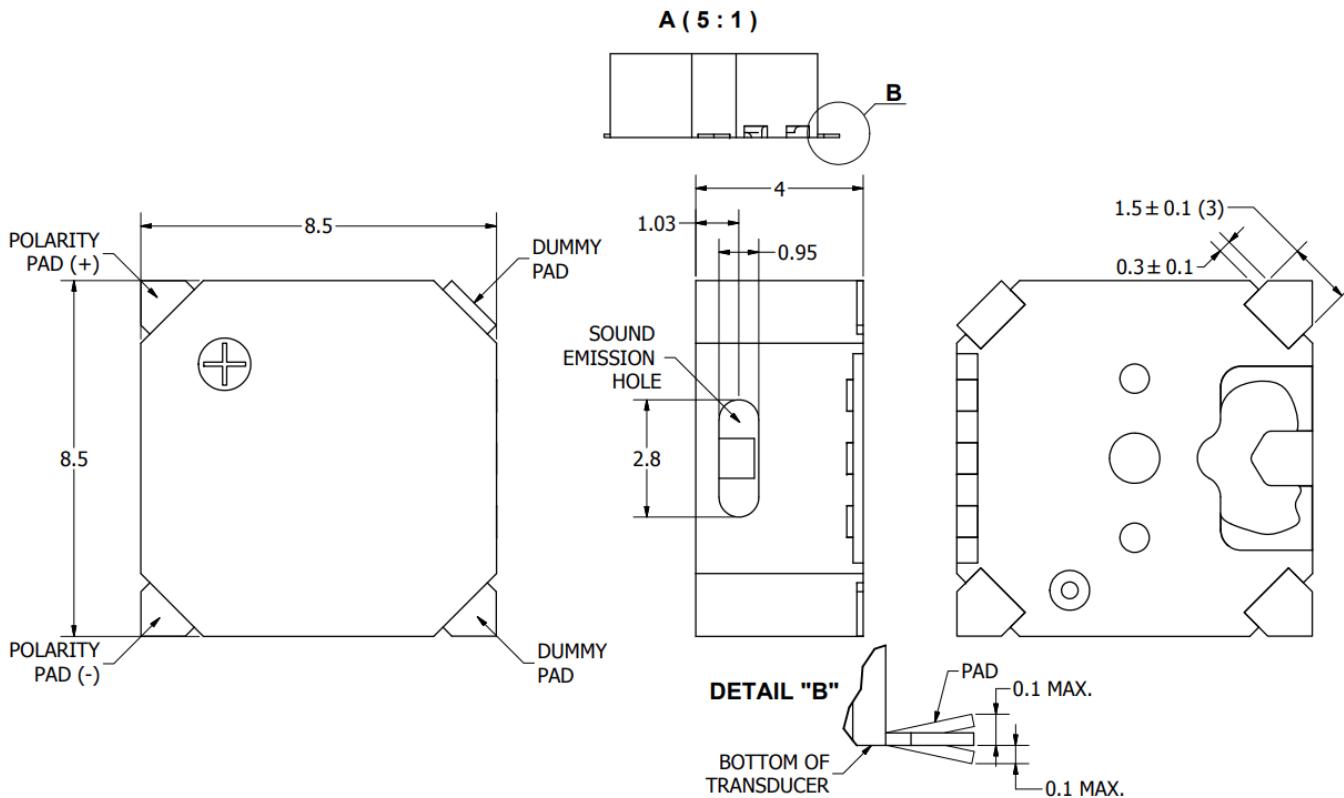
*Reflow profile of Lead-free

Reliability Testing

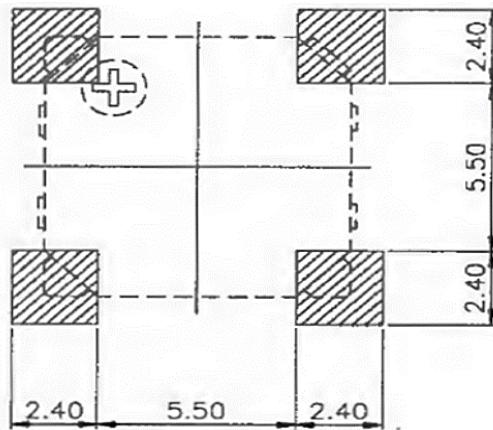
Type of Test	Test Specifications
High Temperature Test	96 hours at $85\pm2^{\circ}\text{C}$, with random humidity.
Low Temperature Test	96 hours at $-40\pm2^{\circ}\text{C}$, with random humidity.
Humidity Test	12 hours at 25 to 60°C with relative humidity at 90-95%, 10 cycles.
Temperature Cycle Testing	30°C to 70°C , five 90-minute cycles.
Vibration Test	1.53 mm movement modulated at 10-55 Hz in 3 directions for 6 hours
Drop Test	From a height of 120 cm drop the transducer in free fall in six directions, 3 times.

After testing, part shall rest for two hours and then be tested for a clean, pure tone.

Dimensions



Suggested Land Pattern* *(for surface mount parts)*

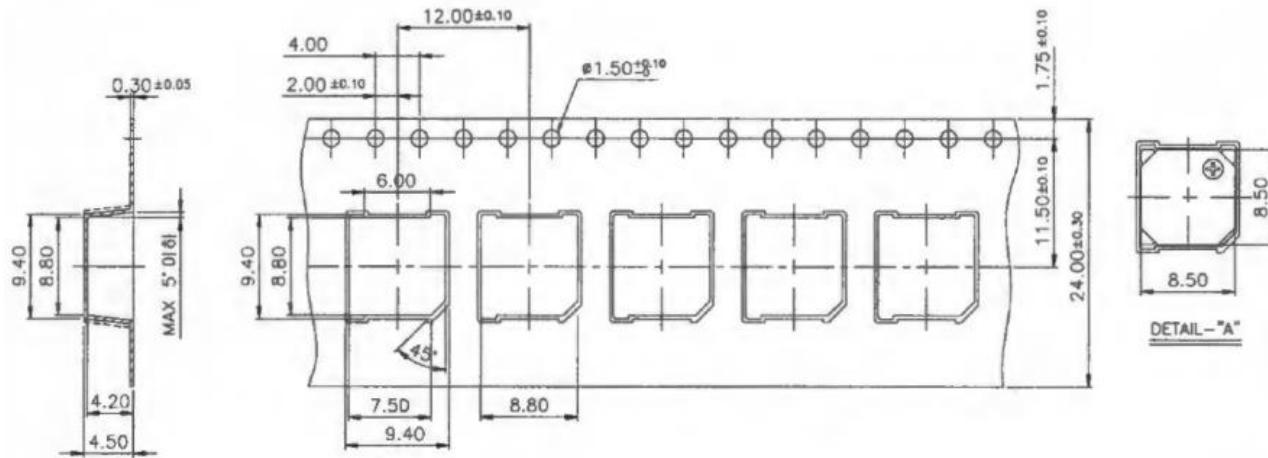


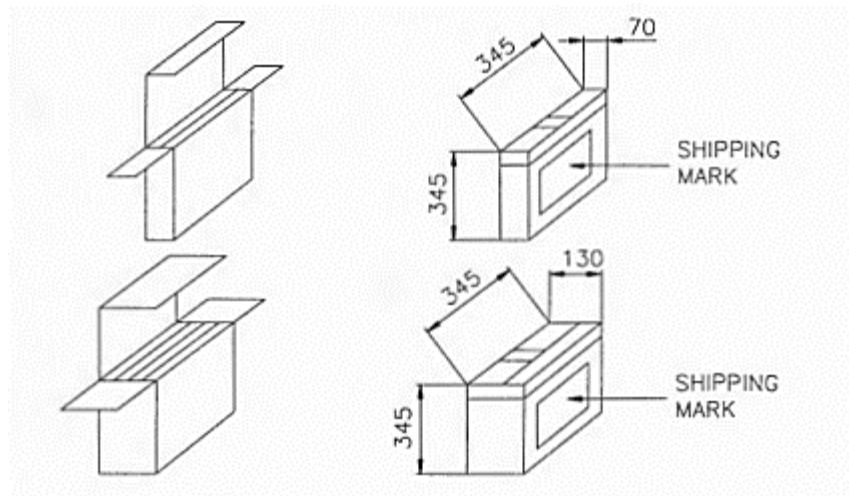
*This land pattern is advisory only and its use or adaptation is entirely voluntary. PUI Audio disclaims all liability of any kind associated with the use, application, or adaptation of this land pattern.

Packaging

1,000 PCS per reel by using the tapping MC

2 rolls or 4 rolls per 1 double carton box packed by polypropylene tape.





Specifications Revisions

Revision	Description	Date	Approved
-	Released from Engineering	05/05/2006	-
A	Revised to Inventor 3-D drawing template	04/29/2010	BR
B	Updated Spec Format, Add details for Reliability, Packaging, etc. Add MSL 2	03/26/2025	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.