



PUI audio



Data Sheet

SMS-2504MS-WP-HT

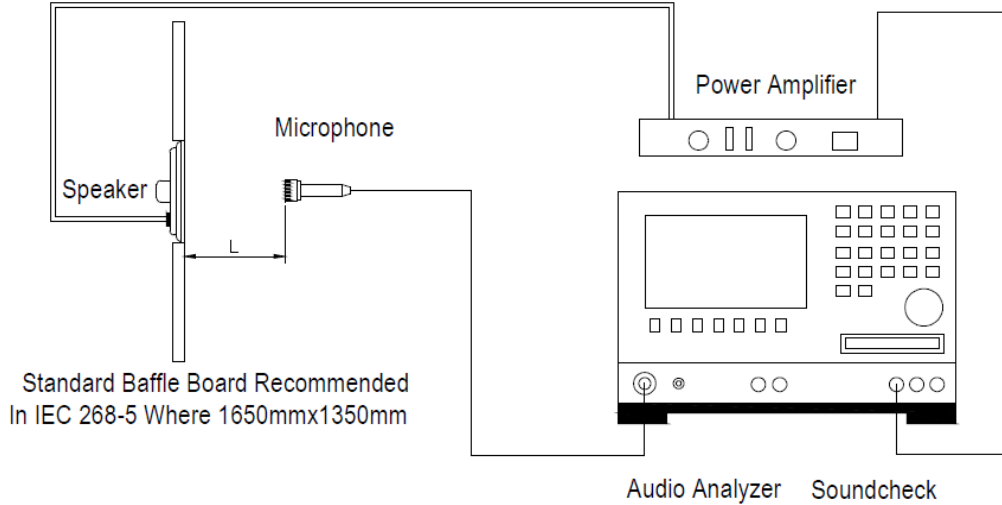
Features:

- Slim 5.9mm height for a low-profile package
- Broad temperature range for wide array of applications
- Surface mountable for ease of installation

Specifications

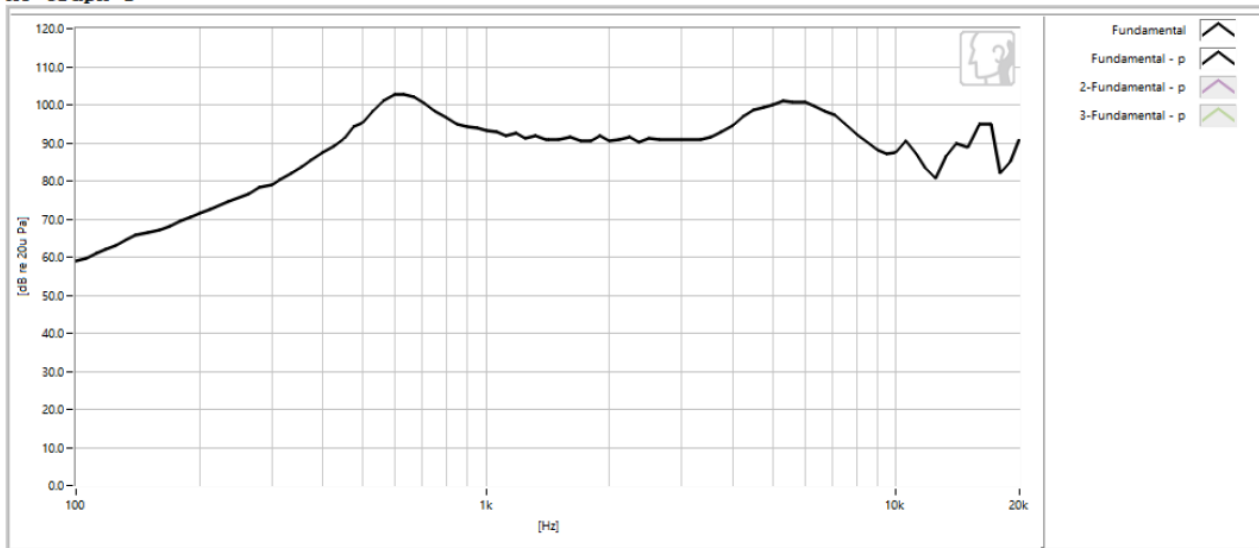
Parameters	Values	Units
Rated Input Power	2.0	Watts
Max Input Power	2.5	Watts
Impedance	4 ± 15%	Ohms
Output SPL (at 1.0K 1.6K 2.0K 3.2KHZ in 1.0W/0.1M average)	90 ± 3	dB
Resonant Frequency	650 ± 20%	Hz
Frequency Range	650 ~ 20,000	Hz
THD	< 10%	
Frame Material	LCP	-
Magnet Material	SMCO	-
Diaphragm Material	Mylar	-
Weight	5.4	Grams
Ingress Protection	IP67	-
Acceptable Soldering Methods	Hand Solder, Reflow Solder	See page 3 for soldering information
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz at 2.83 V	-
Environmental Compliances	ROHS/REACH	-
Polarity	cone will move forward with positive dc current to "+" terminal	-
Storage Temperature	-40 ~ 105	°C
Operating Temperature	-40 ~ 105	°C

Measurement Method (1W/0.1m)

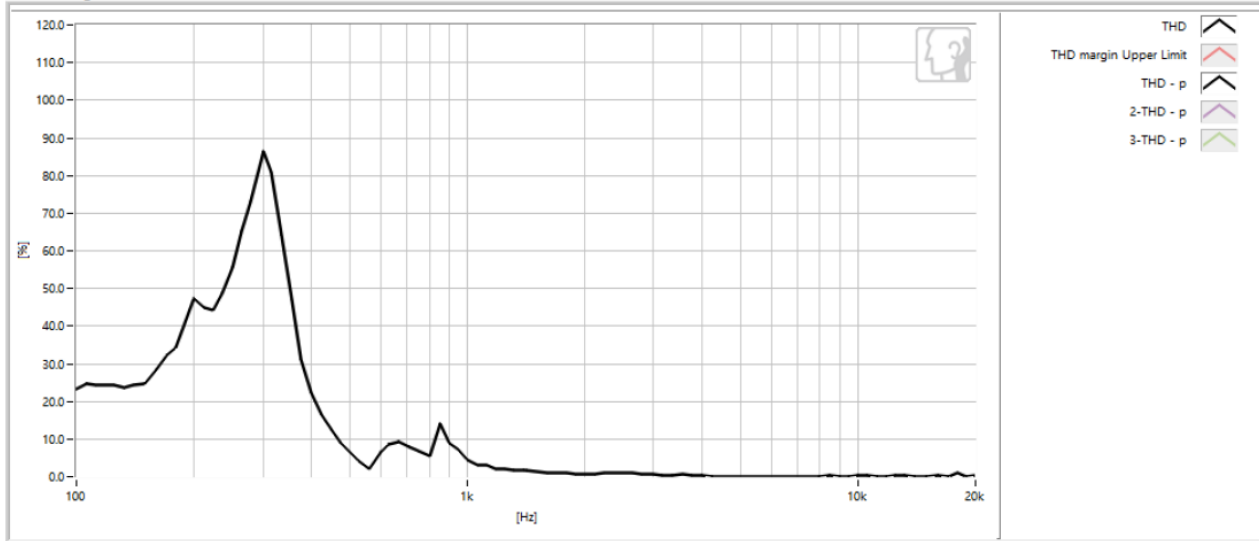


L=10cm

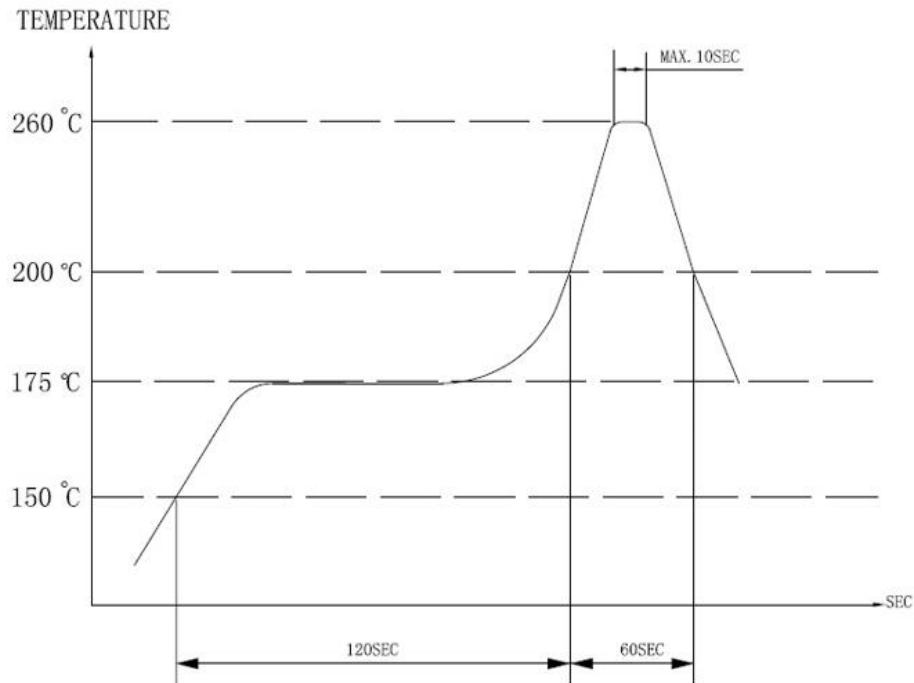
Typical Frequency Response (1W/0.1m)



Total Harmonic Distortion Curve (1W/0.1m)

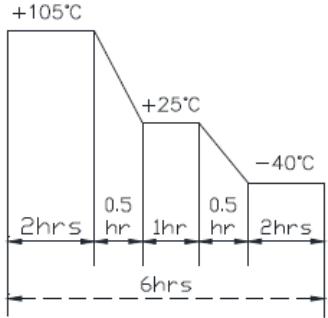


Recommended Soldering Procedure



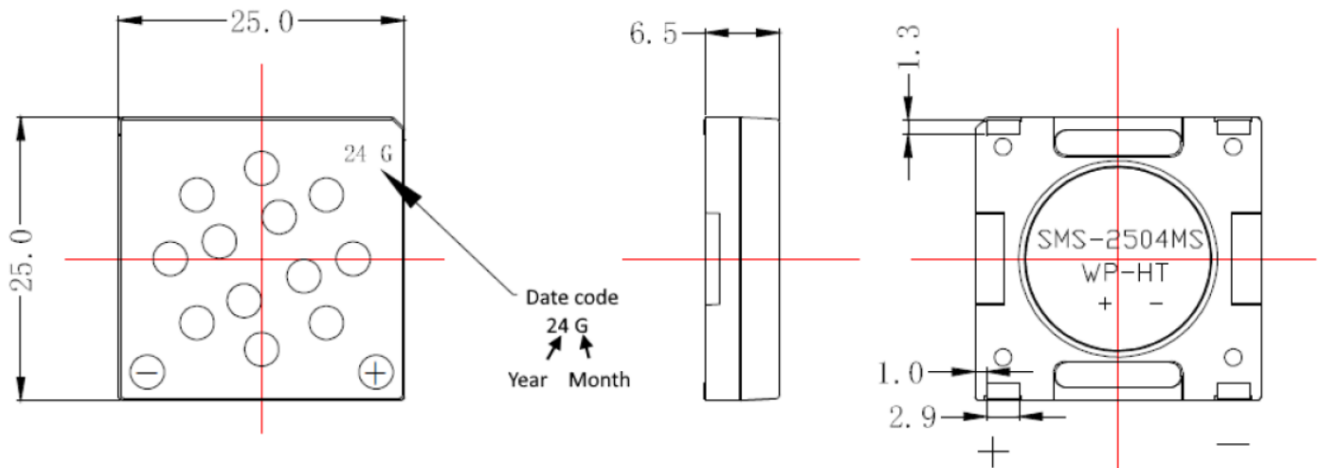
- Heat resistant line
(Used when heat resistant reliability test is performed)
- (2) Manual soldering
Manual soldering temperature 350 °C within 5 sec.

Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at 105±2°C
Low Temperature Test	96 hours at -40±2°C
Humidity Test	96 hours at 40±2°C with relative humidity at 90~95%
Temperature Cycle Testing	Run for 4 cycles with each cycle consisting of: 
Vibration Test	Frequency 30 ± 15 Hz, Amplitude 1.5 mm for 3 Hours
Drop Test	75 CM free falling on Concrete floor, 10 times
Load Test	Must perform normal with program White-Noise source at Rated Power for 96 Hours

After each test, let rest for 6 hours, then the change in SPL shall be within ±3dB

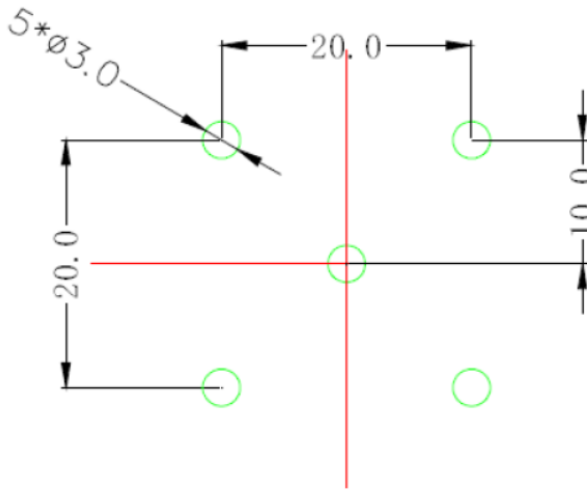
Dimensions



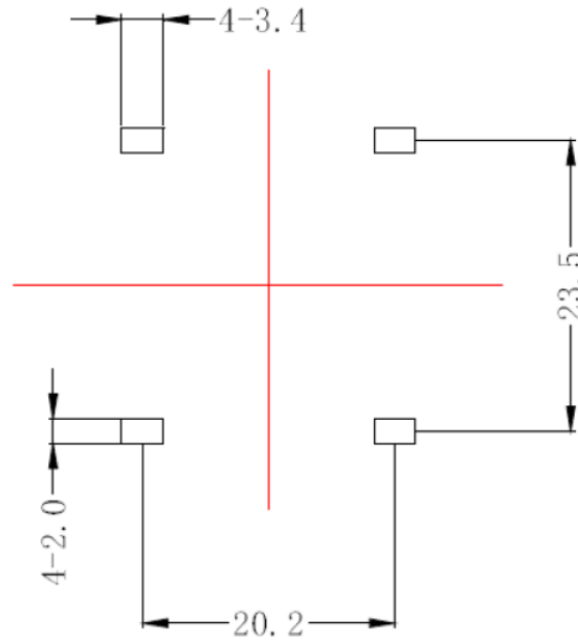
Tolerances ±0.3mm

Suggested Land Pattern*

Recommended pick and place location



Recommended PCB 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.

Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	5/31/2024	JD
B	Updated Polarity	7/31/2024	NK

Note:

- Unless otherwise specified:
 - All dimensions are in millimeters.
 - Default tolerances are $\pm 0.3\text{mm}$ and angles are $\pm 3^\circ$.
- Specifications subject to change or withdrawal without notice.