



PUI audio



Data Sheet

SMS-2504MS-WP-HT

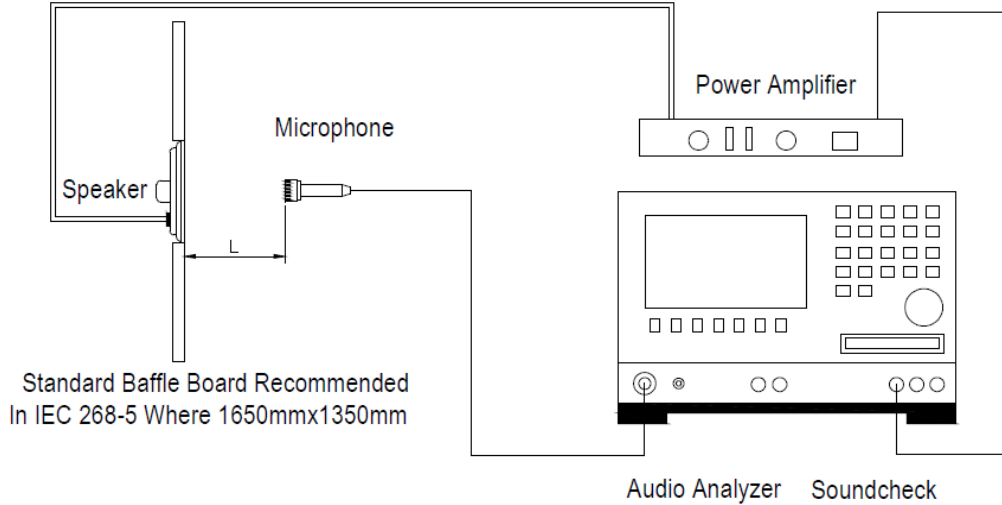
Features:

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

Specifications

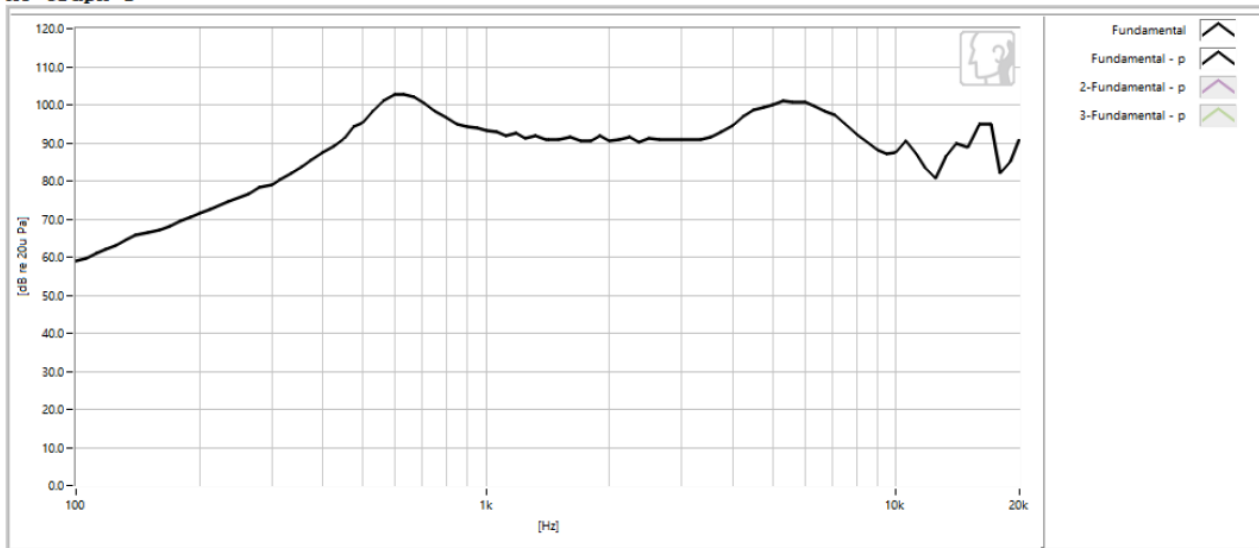
Parameters	Values	Units
Rated Input Power	2.0	Watts
Max Input Power	2.5	Watts
Impedance	4 ± 15%	Ohms
Output SPL (at 1.0K 1.6K 2.0K 3.2KHZ in 1.0W/0.1M average)	90 ± 3	dB
Resonant Frequency	650 ± 20%	Hz
Frequency Range	650 ~ 20,000	Hz
THD	< 10%	
Frame Material	LCP	-
Magnet Material	SMCO	-
Diaphragm Material	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)

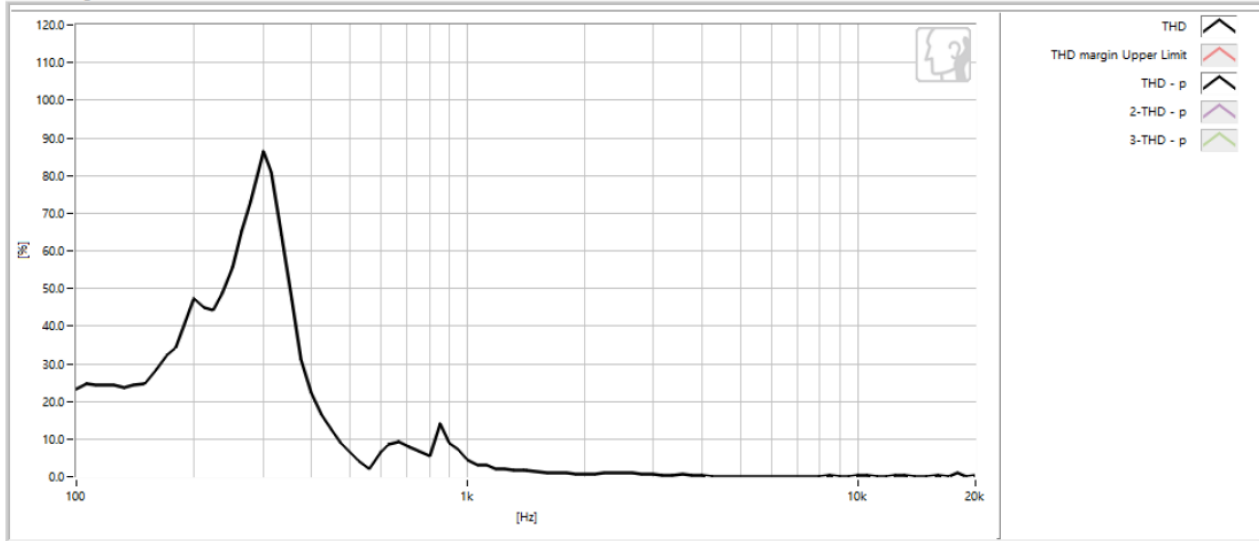


L=10cm

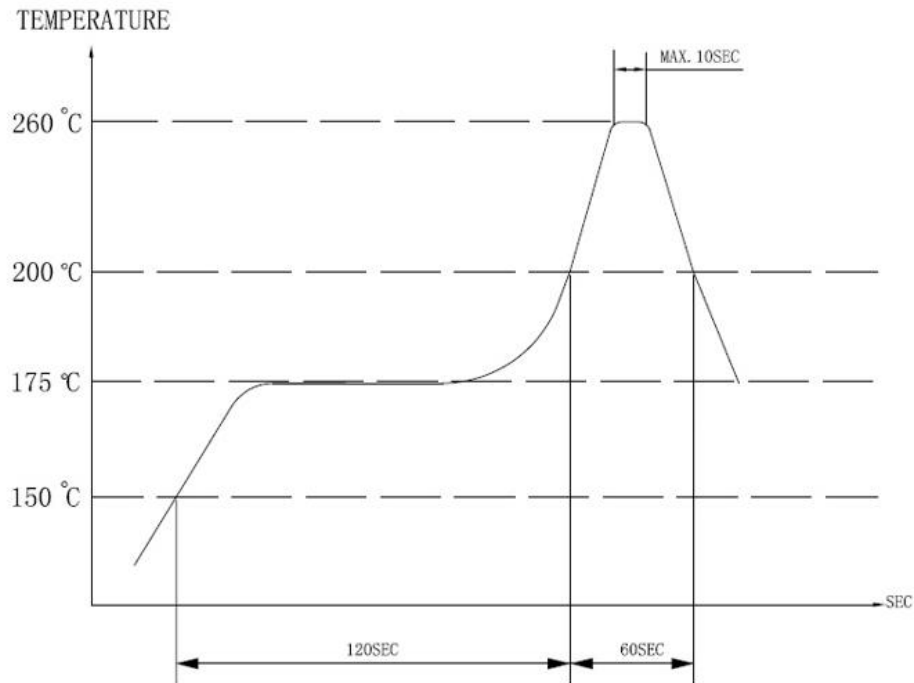
Typical Frequency Response (1W/0.1m)



Total Harmonic Distortion Curve (1W/0.1m)



Recommended Soldering Procedure



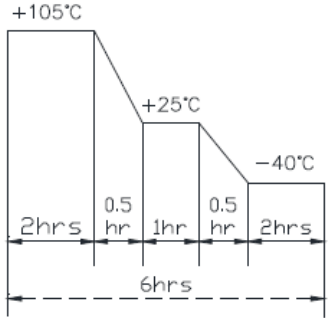
Heat resistant line

(Used when heat resistant reliability test is performed)

(2) Manual soldering

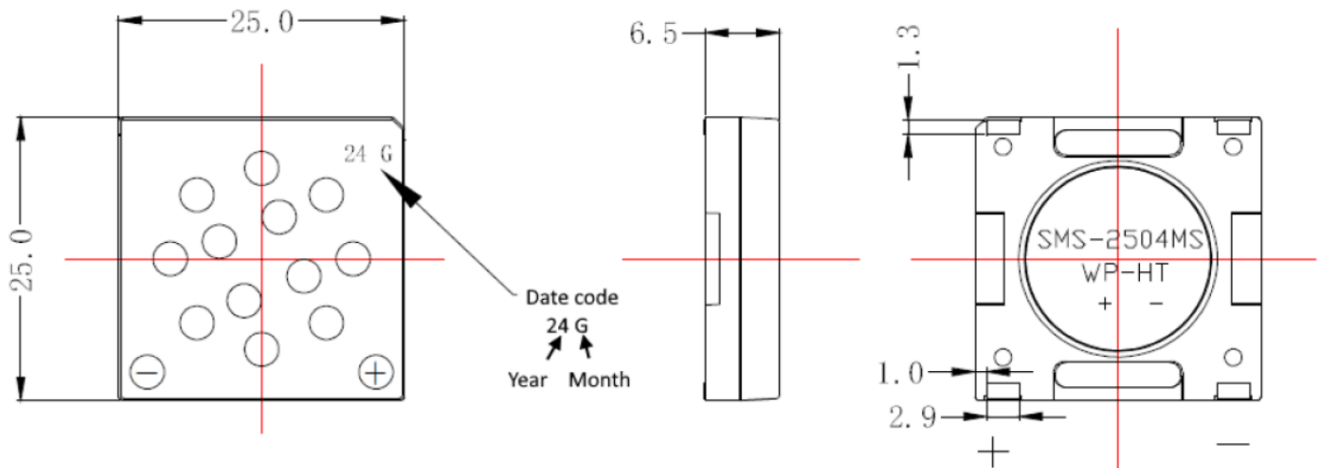
Manual soldering temperature 350 °C within 5 sec.

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

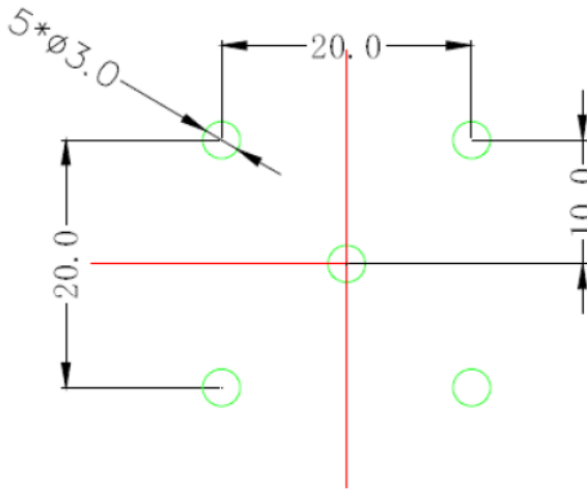
Dimensions



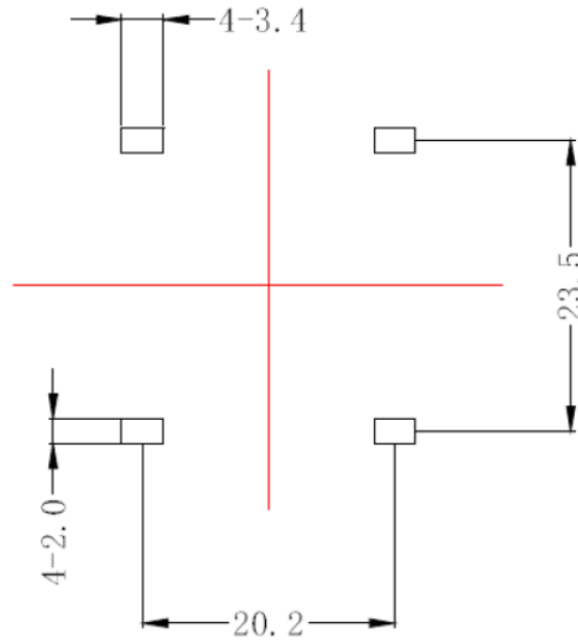
Tolerances ±0.3mm

Suggested Land Pattern*

Recommended pick and place location

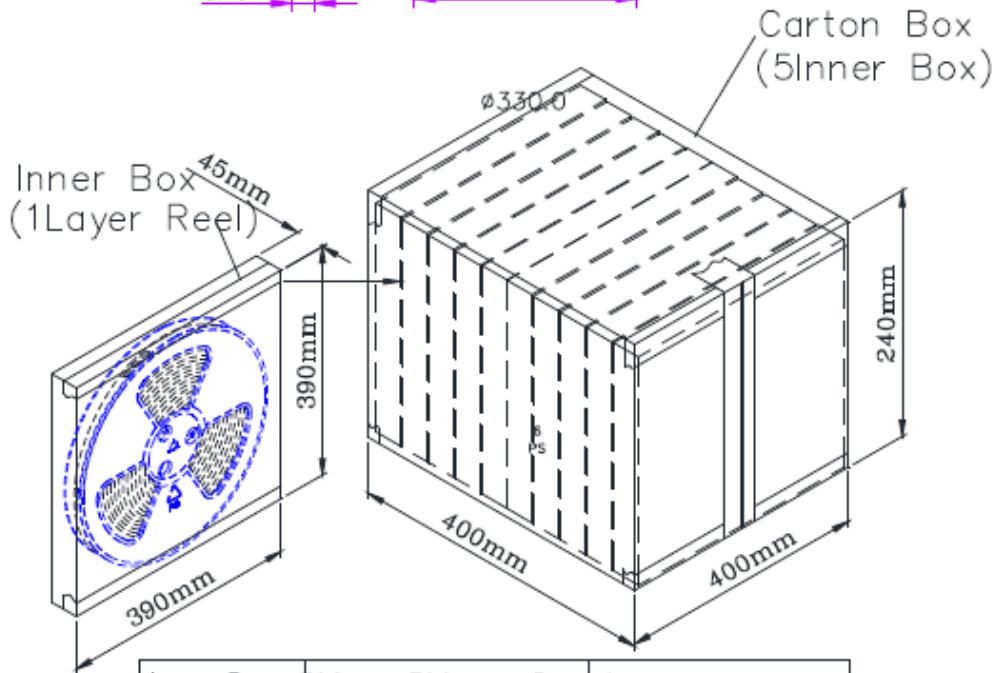
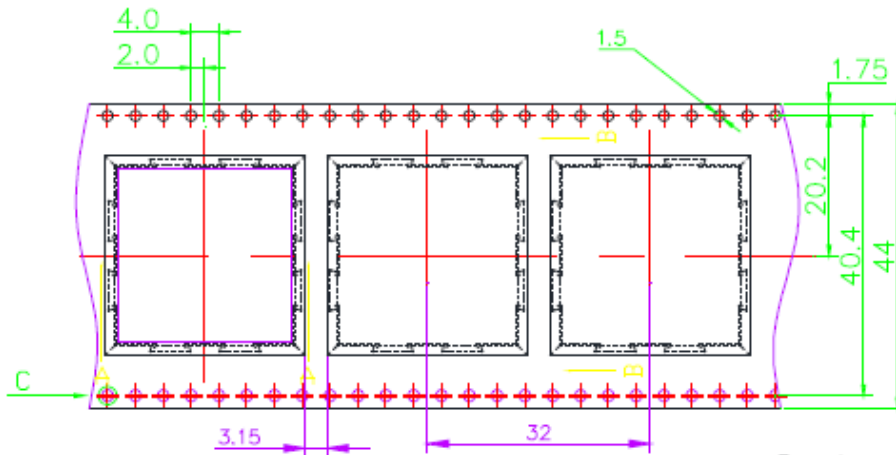
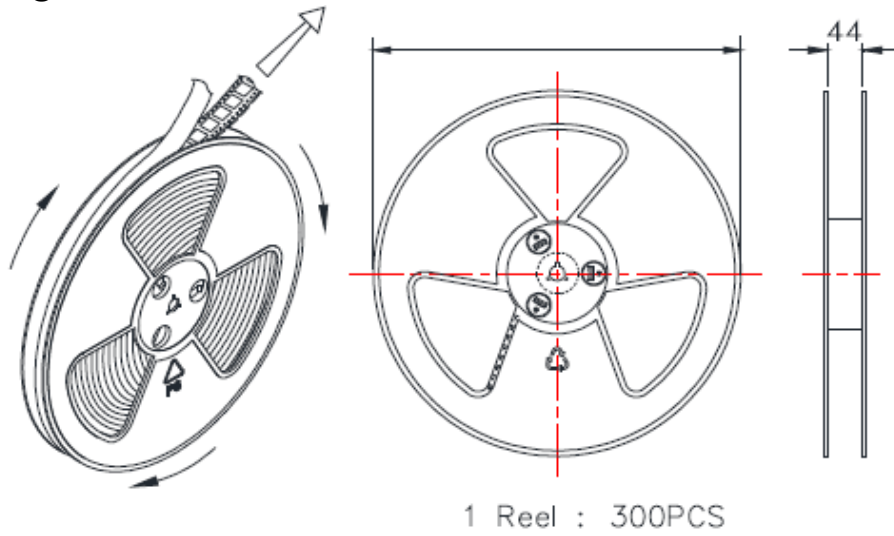


Recommended PCB land pattern



*This land pattern is advisory only and its use or adaptation is entirely voluntary.
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Packaging



Inner Box	390mmx390mmx45mm	1x300PCS=300PCS
Carton Box	400mmx400mmx240mm	5x300PCS=1,500PCS

Specifications Revisions

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

Note:

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

Mouser Electronics

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