

APPROVAL SHEET



FHD ELECTRONICS CORPORATION

CUSTOMER NAME : _____
COMMODITY : Mylar Speaker
TDAUSA PART NO. : MS1511K03-8E008-S65
CUSTOMER PART NO. : _____

Approved by	Y. J.	Prepared by	HY Shen
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Customer Approval			
Approved		Rejected	

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A. PART NO.: MS1511K03-8E008-S65

B. SPECIFICATION

Test condition: Temperature: 15~35°C Related Humidity:25~75% (GB/T9396-1966)

No.	Item	Specification	Condition
1	Dimension	15 x 11 x H 3 mm	
2	Impedance	8 Ω \pm 20%	1.0V at 2000Hz
3	Resonant Frequency	550Hz \pm 20%	In 1cc box @ 1.0V (without baffler)
4	Output Sound Pressure Level S.P.L.	94 \pm 3db	0.1M, 0.8W @ 0.8, 1, 1.2, 1.5KHz (0dB SPL=20uPa) in 1cc box
5	Frequency Range	F0 --- 14KHz	
6	Power Rating	Normal: 0.8 Watts Maximum: 1.0 Watts	In 1cc box In 1cc box
7	Operating Temp.	- 30 ~ + 70°C	
8	Storage Temp	- 40 ~ + 85°C	
9	Audible Noise	The input power shall be set at rated noise power(0.8W in 1cc box). Using an audio oscillator sweep from F0 to 14KHZ in free air. There shall be no buzzes,rattles,nor spurious noises.	0.8W, in 1cc box
10	Distortion	Less than 10%	At 1.0KHz
11	Ingress Protection Rating	IP65	
12	RoHS	The Speaker is RoHS compliant.	
13	Net Weight	Approx 1.5g	

C. ENVIRONMENTAL TEST

No.	Item	Condition	Evaluation standard
1	High Temperature	After being placed in a chamber at +85 \pm 5°C for 96 hours	Being placed for 4 hours at room temperature, speaker shall be measured. SPL should not deviate by \pm 3 db, and resonant frequency should not deviate by \pm 80 Hz, compare with pre-test measurement.
2	Low Temperature	After being placed in a chamber at -40 \pm 5°C for 96 hours.	
3	Humidity Test	After being placed in a chamber at +40 \pm 5°C and 90~95%(RH) Relative Humidity for 96 hours.	

4	Temperature Cycle Test	Temperature: -40°C ↔ +85°C Duration: 2 hours 2 hours Cycle: 5 Cycle	
5	Heat Shock Test	High temperature +85 ± 2°C Low temperature - 40 ± 2°C Changeover Time < 30 seconds Duration 1 hour Cycle 5	

D. MECHANICAL AND VIBRATION TEST

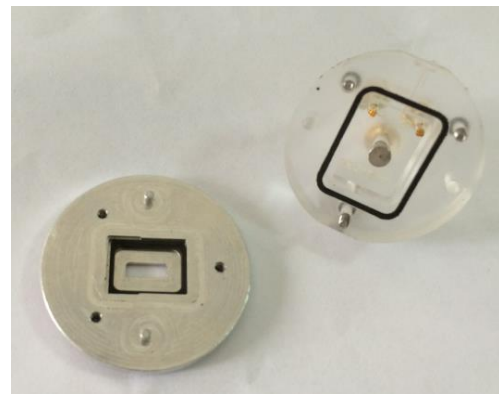
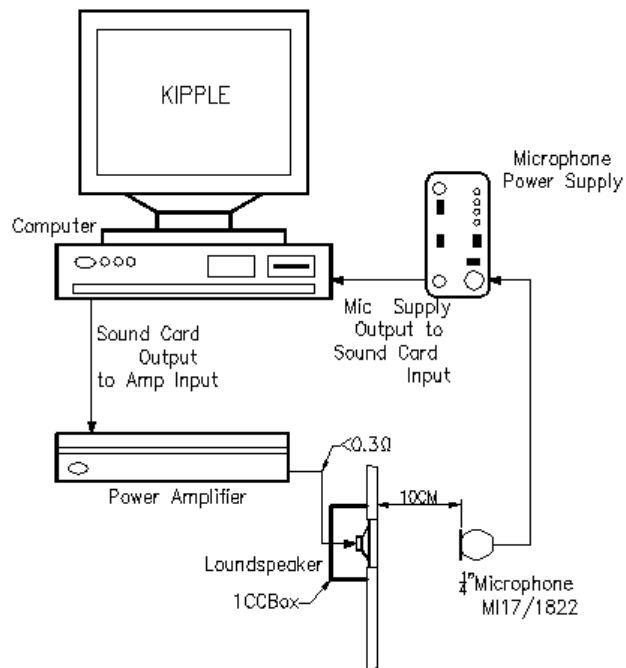
No.	Item	Test condition	Evaluation standard
1	Vibration Test	Frequency 10-55 Hz, Amplitude 1.5mm for 2 hours of 3 axes.	SPL shall not deviate by ±3 db from pre-test measurement,
2	Drop Test (under the unit)	Drop the speakers onto the concrete board 6 times from the height of 100 cm.	

E. RELIABILITY TEST

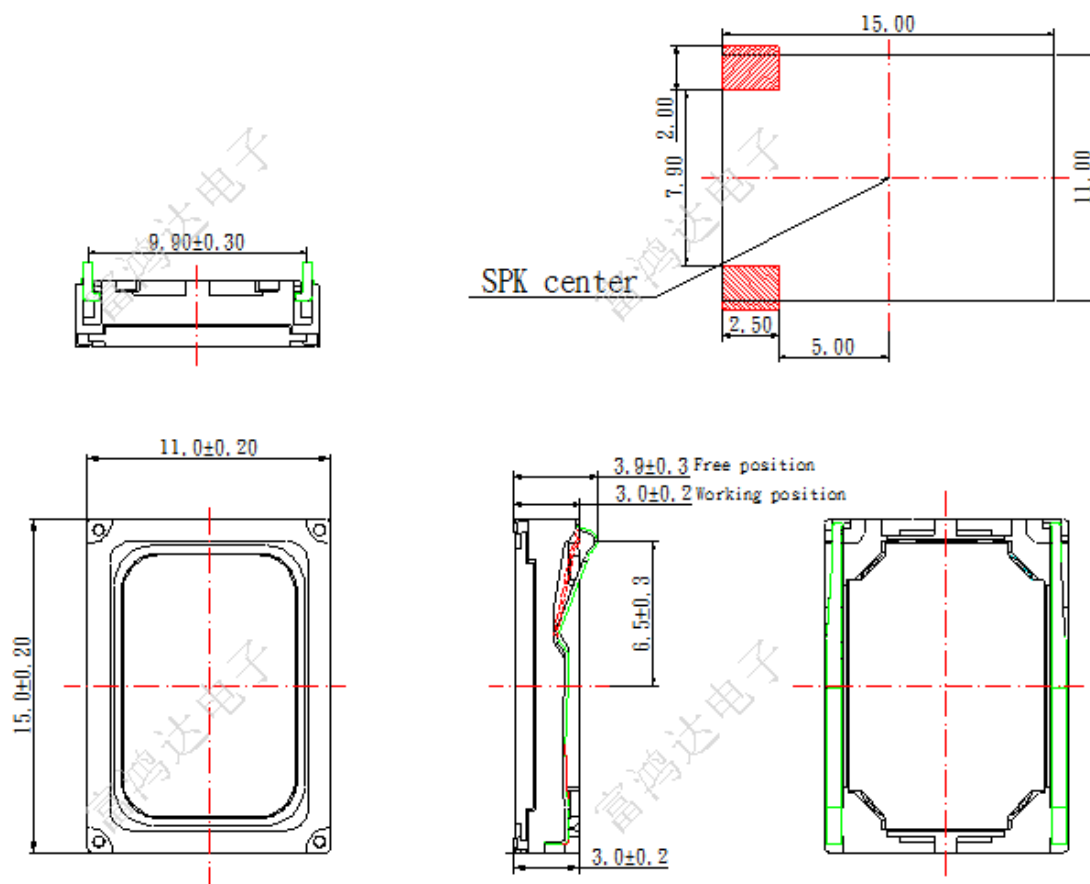
No.	Item	Test conditions	Evaluation standard
1	Load Test	White noise: 20~20KHz, 96 hours @ 0.8W input power, in 1cc box	Speaker should not fail after apply 1KHz White noise rated power input (RMS), 96 hours. After test, SPL shall not deviate by ±3 db from pre-test measurement.

F. ELECTRICAL AND ACOUSTICAL MEASURING CONDITION

1CC BOX

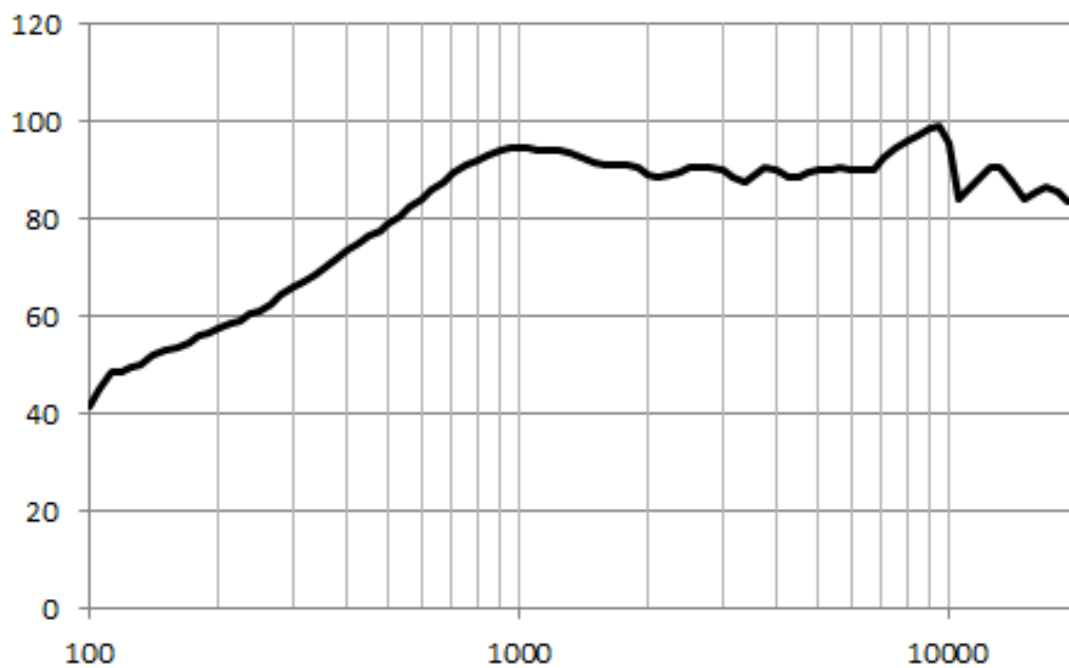


G. DRAWING

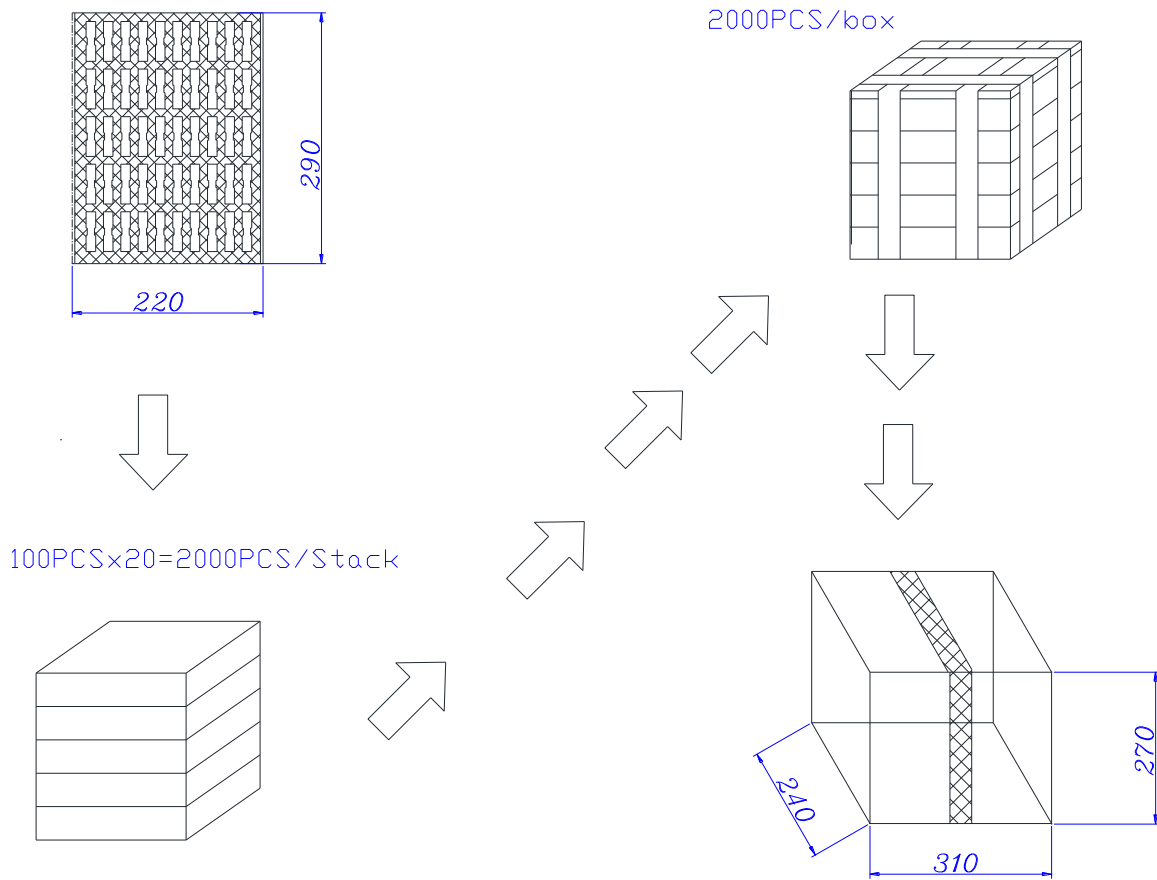


*Unit: mm; Tolerance: $\pm 0.3\text{mm}$ Except Specified

H. FREQUENCY RESPONSE CURVE



I. PACKING INFORMATION



每盘 100 个

每箱 20 盘

总计: 2000 个 / 1 箱

毛重: 4.5KGS

净重: 3.0KGS

100pcs of speaker in each tray

20 trays in one carton

Total: 2000 pcs / 1 carton

Gross Weight: 4.5KGS

Net Weight: 3.0KGS