

MESSRS.**SPECIFICATION FOR APPROVAL****承 认 书**

Product	DYNAMIC SPEAKER
Part No.	HDK-1308DA-8C6(RoHS)
Customer	
Customer Part No.	

Approved By	Checked By	Made By
王台平 APR-03-2019	曹丽萍 APR-03-2019	LILY APR-03-2019

常 州 华 龙 电 子 有 限 公 司**DRAGONSTATE ELECTRONIC CORPORATION**

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EDITION:1.2

1.Specification

HDK-1308DA-8C6(RoHS)

ITEM		SPECIFICATIONS	
01	Type	Dynamic speaker	
02	Dimension	External diameter 13.0 mm	
03	Rated Input Power	0.5W	
04	Max. Input Power	0.8W for 1 minute	
05	Impedance	8 ohm \pm 15% at 2000Hz.	
06	Resonance Frequency (Fo)	950Hz \pm 20% at Fo, 1V	
07	Sensitivity (S.P.L.)	92dB(0.5W/0.1m) \pm 3 dB	at AVE 1.0, 1.2, 1.5, 2.0KHz.
08	Frequency Range	Fo – 20KHz	
09	Total Harmonics Distortion	Max 8 % at 1 KHz, 0.5W.	
10	Voice Coil	Diameter 7.4 mm	
11	Magnet	Rare earth permanent (Nd-Fe-B) magnet Φ 6.8 x 1.0mm	
12	Weight	1.4g \pm 5%g	
13	Appearance	Should not exist any obstacle to be harmful to normal operation; damages, cracks, rusts and distortions, etc.	
14	Operation Test	Must be normal at program source – 0.5W	
15	Buzz, Rattle, etc.	Should not be audible at 2.0V sine Wave between Fo to 20KHz	
16	Polarity	When positive voltage is applied to the terminal marked (+), diaphragm should move to the front.	
17	Terminal Strength	Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.	
18	Temperature	Operating temperature: -20°C to +60°C Storage temperature: -30°C to +70°C	

2-1 .Test Condition

Standard

Temperature : 15 ~ 35℃

Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

Judgement

Temperature : 20±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

2-2 . Standard Test Fixture

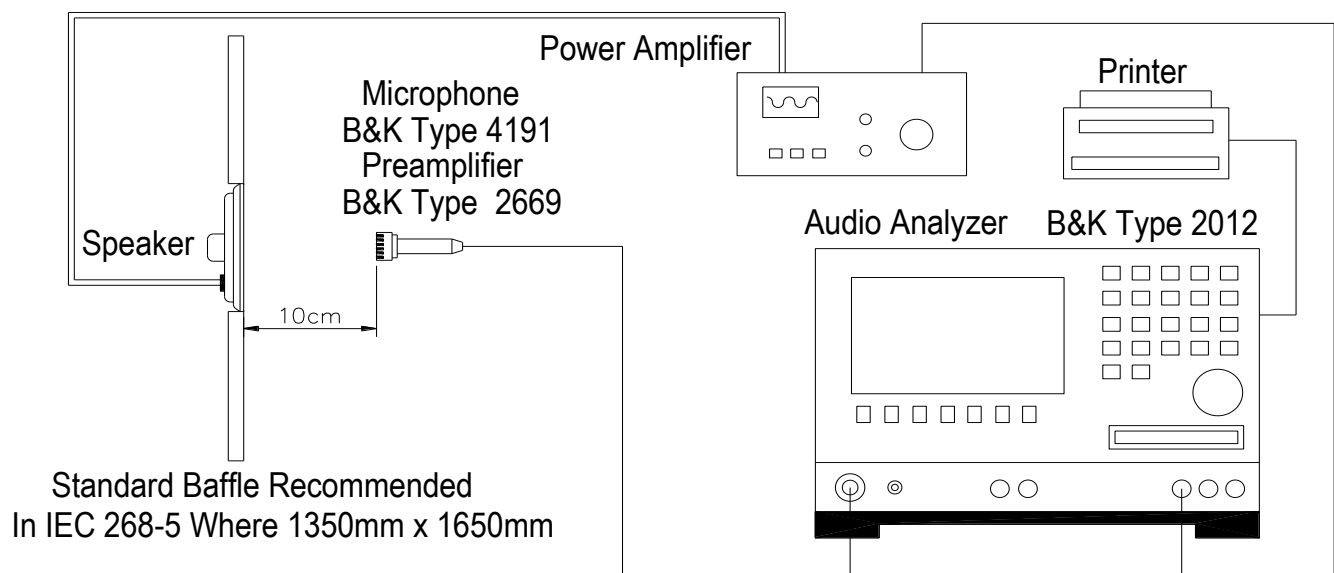
1.Input Power : 0.5W (2.0V)

2.Zero Level : -dB

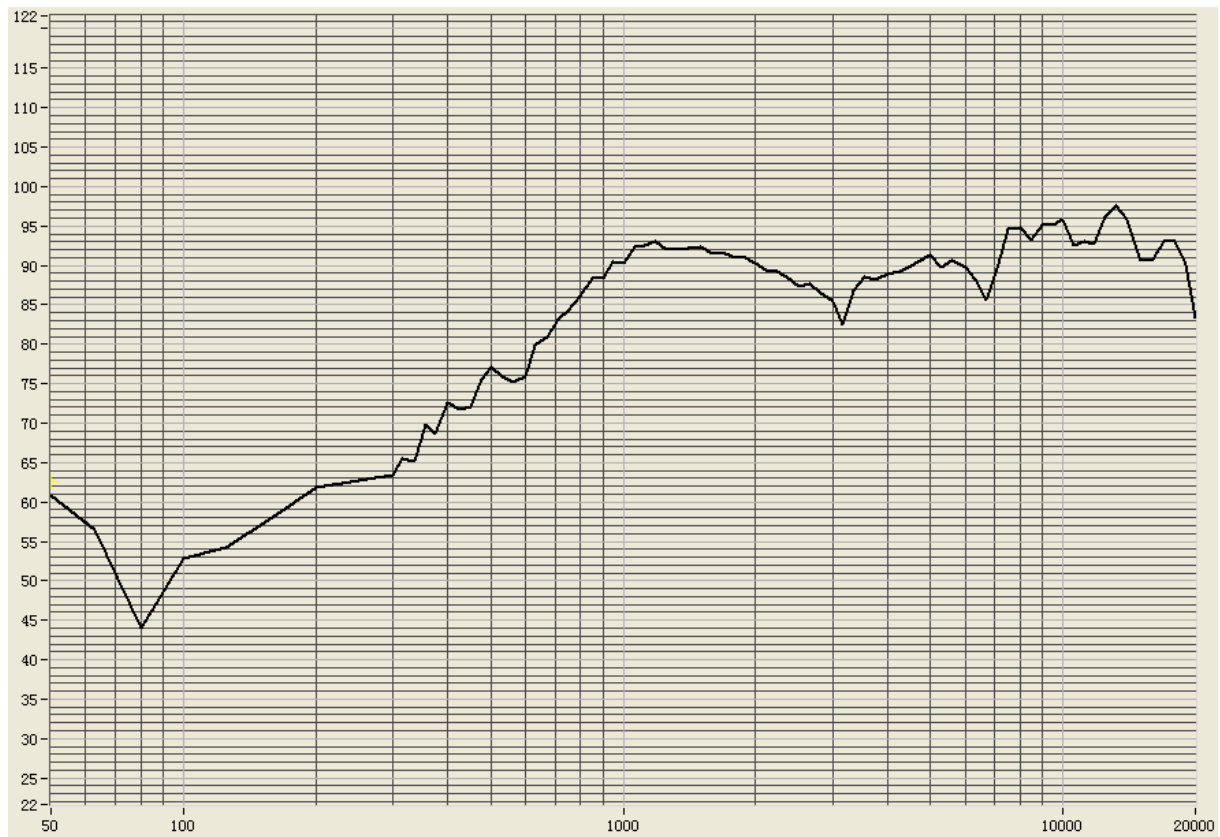
3.Mode : SPEAKER

4.potentiometer Range : 50dB

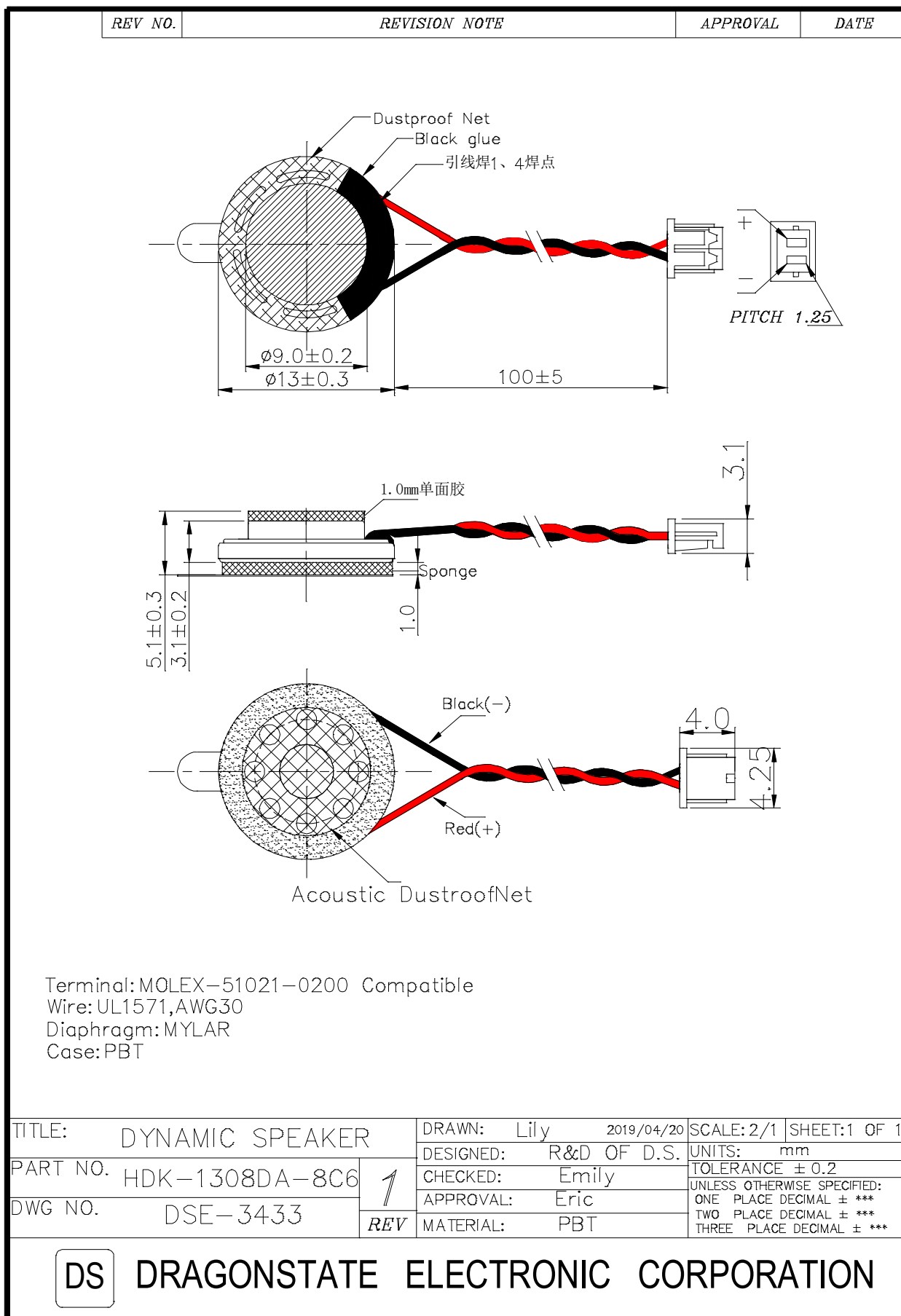
5.Sweep Time : 0.5sec



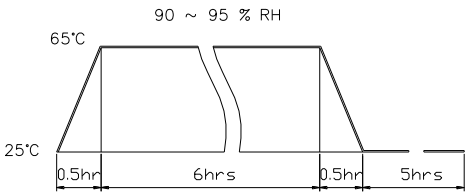
2-3. Frequency Response Curve



3.Dimension



4. Reliability Test


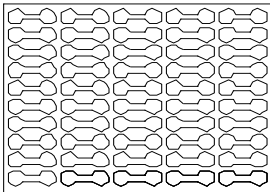
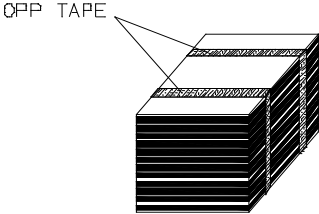
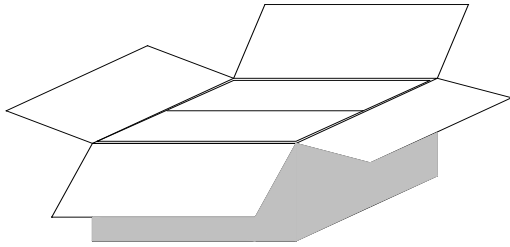
Items.		Specifications
01	High temp. Test	Keep 96 hours at $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
03	Humidity test	Keep 96 hours at $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ relative humidity 95% and leave 3 hours in normal temperature and then checked.
04	Temp./Humidity cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;</p> 
05	Thermal cycle test.	Low temperature: $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$, temperature: $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$, cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
06	Vibration	10~200~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
07	Fix drop test	Fix on jig. Then drop from 152cm height to the concrete floor X,y, z 6 direction. 5 times each, total 30 times.
08	Free drop test	Free drop from 100cm height to the concrete floor X,y, z 6 direction. 1 times each, total 6 times.
09	Rated Power test	Rated Power white noise is applied for 96 hours
10	Max Power test	Max power 1 min on – 2 min off 10 cycles.
11	Terminal strength test	Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.
Criterion: After these test , the change of S.P.L shall be within ± 3 dB .		

Soldering Condition

Recommend using constant branding iron in **30W**, and in temperature range **$350 \pm 10^{\circ}\text{C}$** .

Soldering time **2** seconds.

5.Packing

REV NO.	REVISION NOTE	APPROVAL	DATE
	<div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;"> Cover(325*245*5mm) Material: Paper </div>		
	<div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;"> Box(325*245*13mm) 100pcs Material: Paper+Epe </div>		
	<div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;"> Middle(325*245*155mm) 1000pcs(10*100pcs) Material: Paper+Epe </div>		
	<div style="text-align: center;">  </div> <div style="text-align: right; margin-top: 10px;"> Outer Box(490*360*350mm) 5000pcs(5*1000pcs) Material: Paper </div>		
单位: mm			
TITLE: packing		DRAWN: Lily 2016/08/25 DESIGNED: R&D QF D.S. CHECKED: Emily APPROVAL: Eric MATERIAL: ***	
PART NO.	1	SCALE: 2:1 SHEET: 1 of 1	
DWG NO.		UNITS: mm TOLERANCE 20~11 ± 0.3 10~5 ± 0.2 <4 ± 0.1	
REV			
<div style="border: 1px solid black; display: inline-block; padding: 2px 5px;">DS</div> DRAGONSTATE ELECTRONIC CORPORATION			

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