

SPECIFICATION FOR APPROVAL

承 認 書

Description : Speaker

Kingstate Part No. : KDMG40016-20W

Customer's Model No. : _____

Specification No. : POD-7589

Number Of The Edition : 1.1

CUSTOMER'S APPROVED SIGNATURE		

志豐電子股份有限公司 KINGSTATE ELECTRONICS CORP.

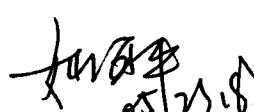


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Approved by	Checked by	Issued by
 05/23/18	王振威 2018.5/22	雷士兵 2018.05.14

A. SCOPE 範疇

This specification applies speaker, **KDMG40016-20W**

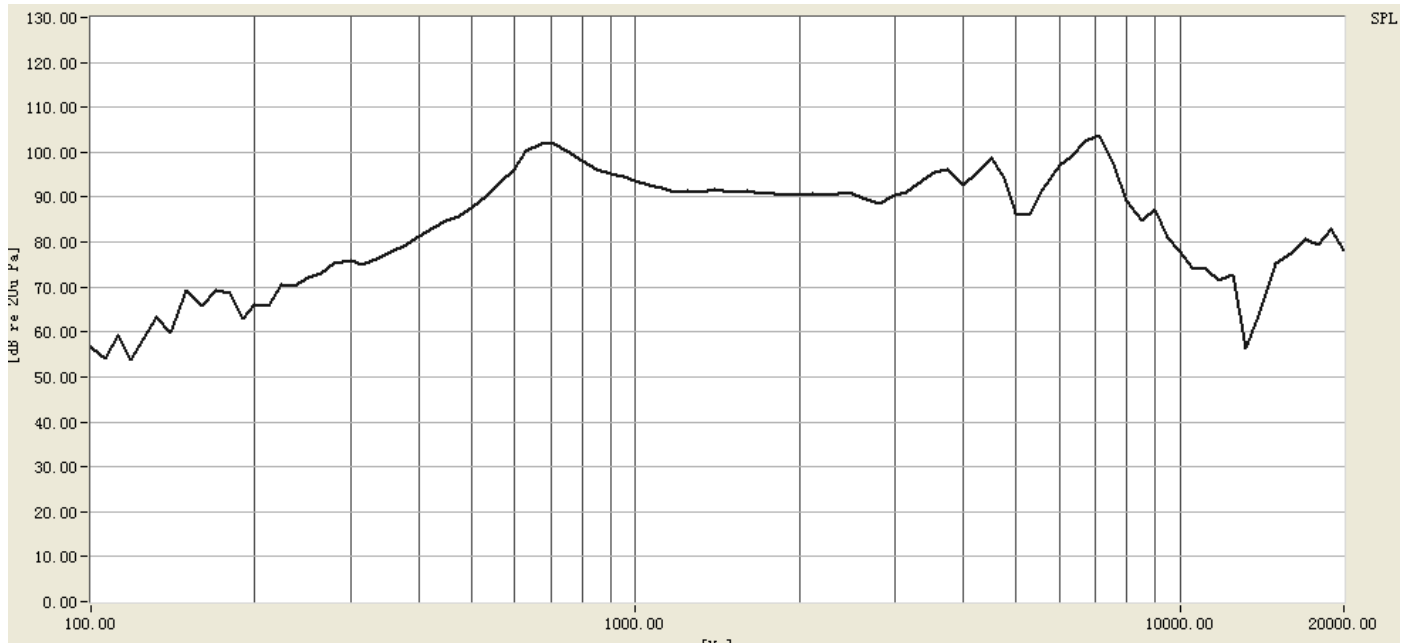
此規格書適用於喇叭, **KDMG40016-20W**

B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	40.0x6.5	Refer to attached drawing in details
2	Power Rating 功率		W	Rated. 2.0/ MAX2.5	Maximum Power:IEC-60268-5 Filter 60s On/120s Off 10 Cycles (Room TEMP.)
3	Impedance 阻抗	Ω	ohm	16 \pm 15%	At 2000Hz
4	Resonance Frequency 低音諧振	Fo	Hz	680 \pm 150	At 1.0V
5	Output S.P.L. 音壓位準		dB	90 \pm 3dB(0.1w/0.1m)	At1.2KHz ,1.5KHz , 2.0KHz , 2.5KHz
6	Frequency Rang 有效頻寬		Hz	Fo---10K	Output S.P.L. -10dB
7	THD		%	<15%	At 1.0KHz, 0.1M/0.1W
8	Voice Coil 音圈		mm	13.28	KSV
9	Magnet 磁石		mm	12.5*1.5 N38	Nd-Fe-B
10	Diaphragm 音膜		mm	39.0	PEN(透明)
11	Colour for Voice Coil Glue 音圈固定膠顏色			主體固定膠(紅色) 引線固定膠(綠色)	/
12	Flux Density 磁通密度		Gauss	/	/
13	Operating temp. 操作溫度		°C	-40 ~ +85	/
14	Storage Temperature 儲存溫度		°C	-40 ~ +90	/
15	Buzze & Rattle 異常音		/	/	Not be audible at 5.65Vsine wave between 500Hz~5KHz 輸入 5.65V 正弦波從 500Hz 到 5KHz 之間無異常音
16	Weight 重量		g	10.5	
17	Material 材質			SPCC	支架
18	Environmental Protection Regulation 環保法規			RoHS 2.0	
19	Waterproof 防水			IP65	

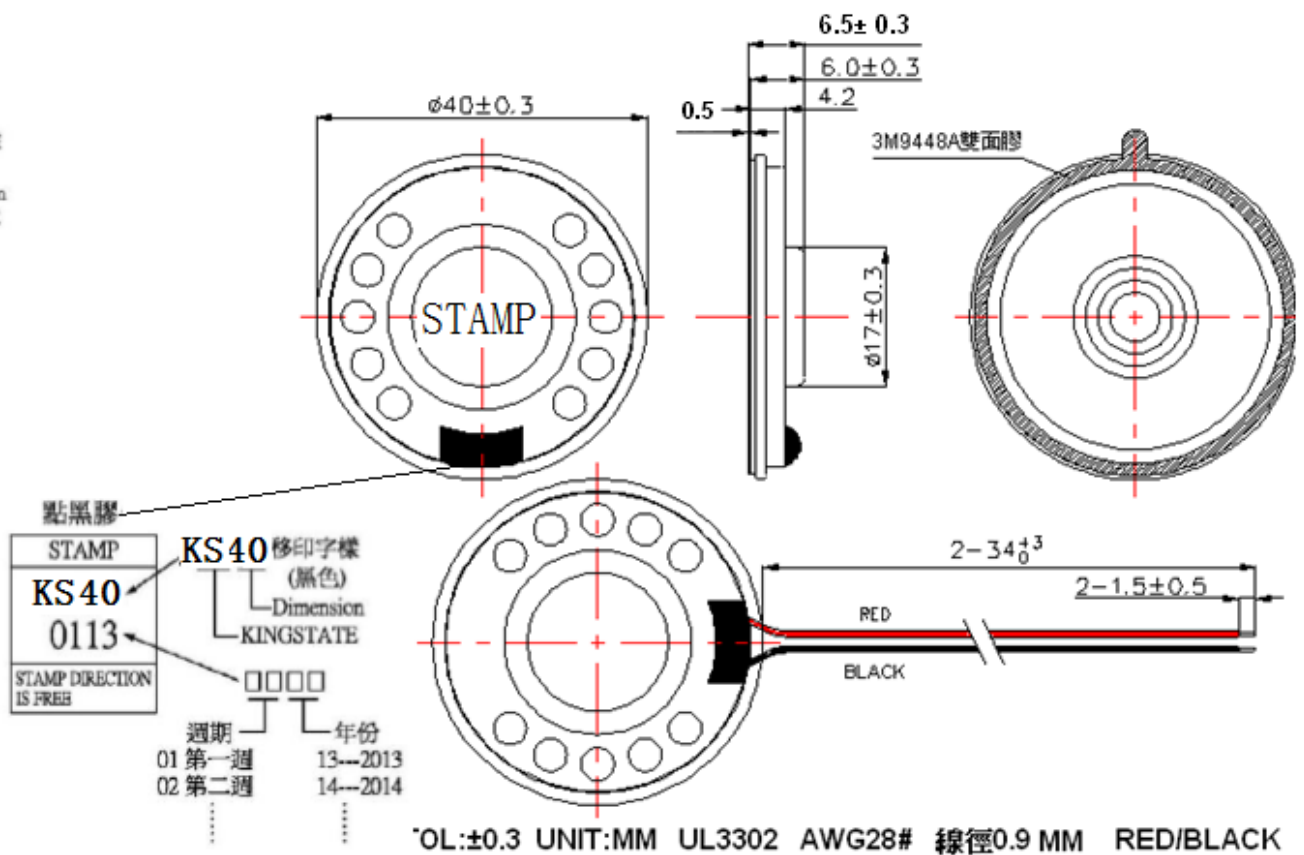
C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線

Figure1 Typical Frequency Response (Only Reference)

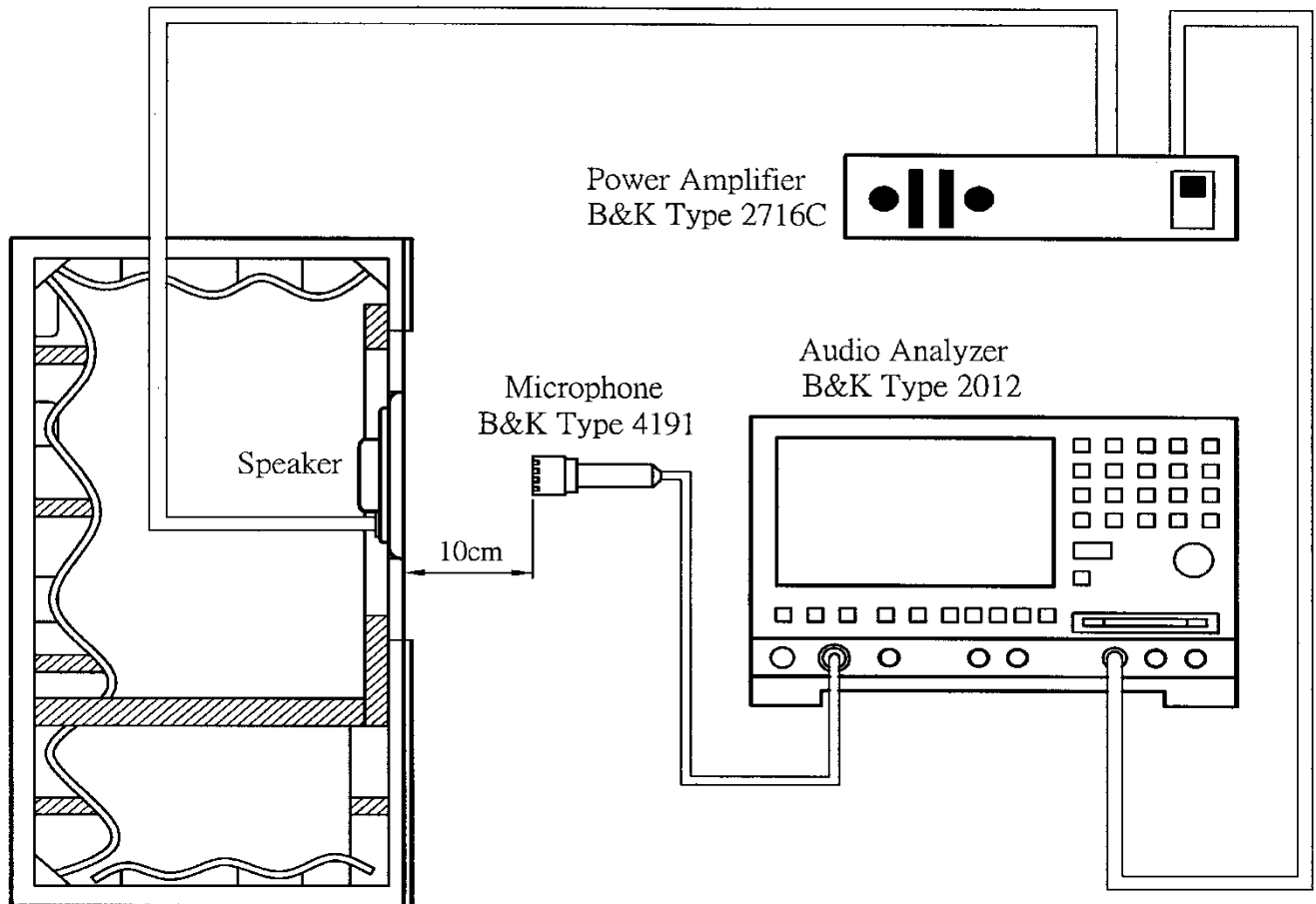


1.26V 0.1m

D. APPEARANCE DRAWING 外觀尺寸圖



E. MEASUREMENT CIRCUIT 測量線路



JIS C5531

940mm x 640mm x 1240mm

F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	Solderability 焊錫附著性 (Connector excepted) (端子類不適用此項)	Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds. 裸線部份浸入松香溶液 5 秒後,再浸入 $+270\pm 5^{\circ}\text{C}$ 熔融焊錫槽 3 ± 0.5 秒.	90% min. stripped wires shall be wet with solder.(Except the edge of terminal) 浸入裸線部份附著焊錫 90% 以上.(末端斷面不算)
2	Lead Wire Pull Strength 線材拉力	The pull force shall be applied to double lead wire : Horizontal 3.0N(0.306kg) for 30 seconds. Vertical 2.0N(0.204kg) for 30 seconds. 雙線材水平方向施以 3.0N(0.306kg) 的力量, 垂直方向施以 2.0N(0.204kg) 的力量,各 30 秒.	No damage and cutting off 線材不鬆動, 不脫落.
3	Vibration Test 振動測試	Speaker shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. 振動週波數 10~55Hz、全振幅 1.5mm 於 X.Y.Z 3 個方向, 各 2 小時.	No obstacle to be harmful to normal operation; damages, cracks, rusts and distortions. Should not be audible at 5.65V sine wave between 500Hz ~ 5KHz
4	Drop Test 落下測試	Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm 將揚聲器置於盒中, 自 75 公分高度落在 40mm 木板上共 10 次.	測試後無任何障礙防礙正常操作. 且在輸入 5.65V 正弦波從 500Hz 到 5KHz 之間無異常音.

G. ENVIRONMENTAL TEST 環境試驗

No.	Item	Test conditions	Evaluation standard
1	High temp. Test 高溫測試	After being placed in a chamber at +90°C for 96 hours 置於+90°C環境中 96 小時	Being placed for 6 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 1.26V sine wave between 500Hz ~ 5KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB 經測試後, 靜置於+25°C (室溫)環境中 6 小時後, 測試後無任何障礙防礙正常操作. 且在輸入 1.26V 正弦波從 500Hz 到 5KHz 之間無異常音. Fo 與原規格值相同, 輸出音壓變化量在±3dB 內.
2	Low temp. Test 低溫測試	After being placed in a chamber at -40°C for 96 hours. 置於-40°C環境中 96 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +45°C and 85±5% RH relative humidity for 168 hours. 置於+45°C, 相對濕度 85±5%環境中 168 小時	
4	Temp. cycle test 溫度循環測試	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of: 單體承受溫度循環測試 5 次, 其循環內容如圖示:</p> <p>The diagram illustrates a temperature cycle test profile. It starts at +85°C for 2 hours, then ramps down to +25°C in 0.5 hours. It remains at +25°C for 1 hour, then ramps down to -40°C in 0.5 hours. Finally, it remains at -40°C for 2 hours. The total duration of one cycle is 6 hours, indicated by a dashed line at the bottom.</p>	<p>Should not be audible at 1.26V sine wave between 500Hz ~ 5KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB 經測試後, 靜置於+25°C (室溫)環境中 6 小時後, 測試後無任何障礙防礙正常操作. 且在輸入 1.26V 正弦波從 500Hz 到 5KHz 之間無異常音. Fo 與原規格值相同, 輸出音壓變化量在±3dB 內.</p>

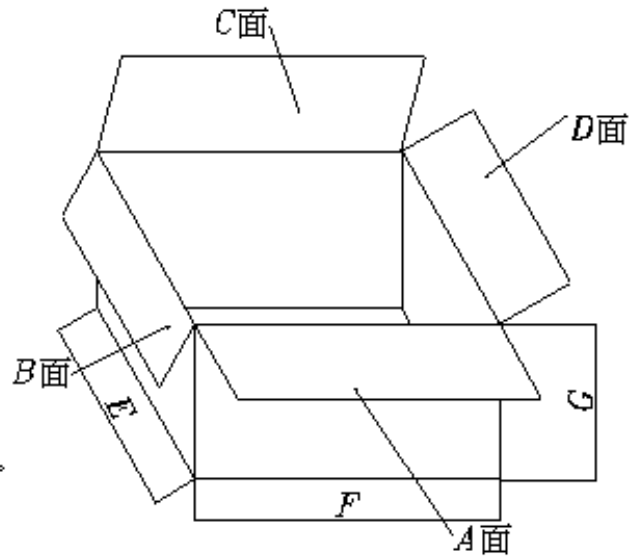
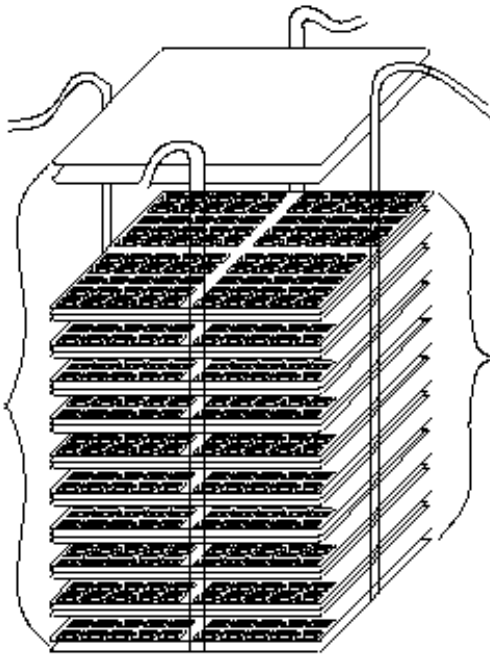
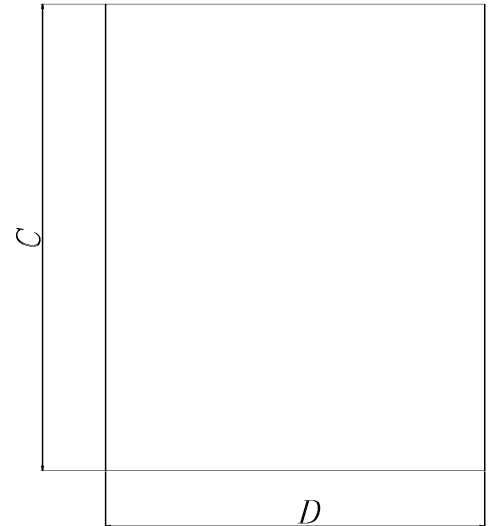
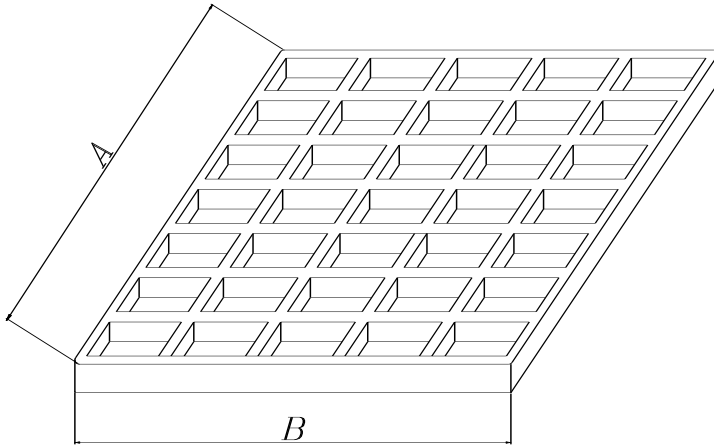
H. RELIABILITY TEST 信賴性試驗

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	2W White noise is applied for 96 hours at room temp. 在室溫下, 輸入功率 2W, 白噪音連續操作 96 小時.	<p>Being placed for 1 hours at +25°C, speaker shall be measured. No obstacle to be harmful to normal operation; damages, cracks, rusts, etc. Should not be audible at 5.65V sine wave between 500Hz ~ 5KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB 經測試後, 靜置於+25°C (室溫)環境中 1 小時後, 測試後無任何障礙防礙正常操作. 且在輸入 5.65V 正弦波從 500Hz 到 5KHz 之間無異常音. Fo 與原規格值相同, 輸出音壓變化量在±3dB 內.</p>

TEST CONDITION.

Standard Test Condition :	a) Temperature : +5 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
一般測試條件 :	a) 溫度 : +5 ~ +35°C	b) 濕度 : 45-85%	c) 氣壓 : 860-1060mbar
Judgement Test Condition	a) Temperature : +25 ± 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
爭議時測試條件:	a) 溫度 : +25 ± 2°C	b) 濕度 : 60-70%	c) 氣壓 : 860-1060mbar

I. PACKING STANDARD 包裝規格



包盘尺寸：长 A×宽 B×高	425×255×12mm 35PCS/盘 (G-4945-12T)	14 盘
纸板尺寸：长 C×宽 D×高	425×255×6 mm	1 个
外箱尺寸：长 E×宽 F×高 G	435×265×220mm	35PCS×12=490PCS/箱