

SPECIFICATION FOR APPROVAL

承 認 書

Description : Micro Dynamic Speaker

Kingstate Part No. : KDMG36008-10DWA6

Customer's Model No. : _____

Specification No. : DRD-B430

Number Of The Edition : 1.1

CUSTOMER'S APPROVED SIGNATURE		



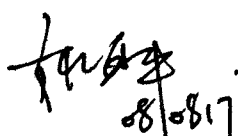
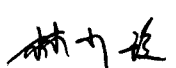
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Approved by	Checked by	Issued by
 08/08/17	 2017.8.7.	王川 2017.08.07

KINGSTATE ELECTRONICS CORPORATION

志豐電子股份有限公司

成品承認書修訂記錄

圖號: DRD-B430			料號: KDMG36008-10DWA6
修訂日期	提出者	版次	修訂記錄內容

Preliminary

A. SCOPE 範疇

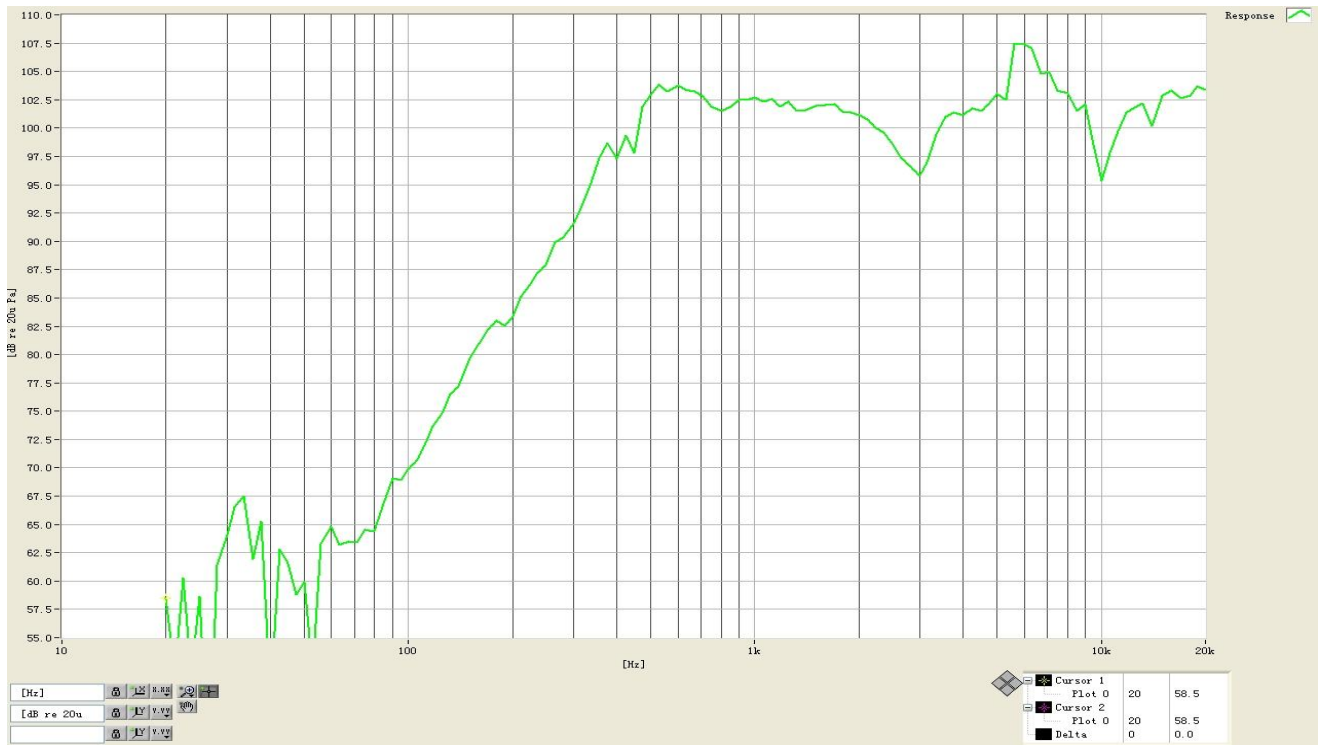
This specification applies speaker, **KDMG36008-10DWA6**

此規格書適用於喇叭, **KDMG36008-10DWA6**

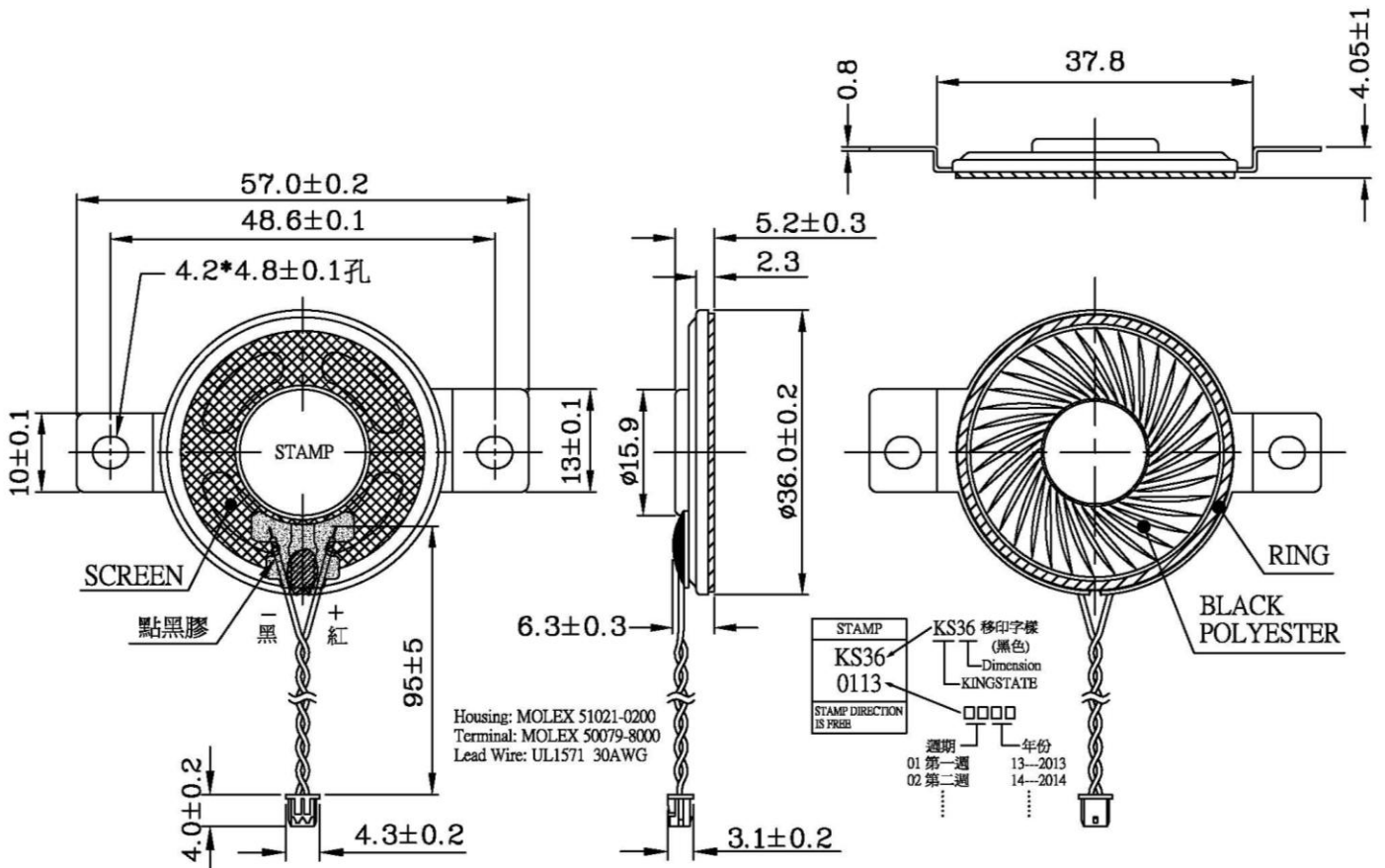
B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	\varnothing 36.0 x 5.2	
2	Power Rating 功率		W	Rated. 1.0/ MAX. 1.5	Maximum Power:IEC-60268-5 Filter 60s On/120s Off 10 Cycles (Room TEMP.)
3	Impedance 阻抗	Ω	ohm	$8 \pm 15\%$	At 1.20KHz 1.0V
4	Resonance Frequency 低音諧振	Fo	Hz	$600 \pm 20\%$	At 1.0V
5	Output S.P.L. 音壓位準		dB	$103 \pm 3\text{dB}(1\text{w}/10\text{cm})$	At 800Hz, 1K, 1.2K, 1.5KHz (Average figures)
6	Frequency Range 有效頻寬		Hz	Fo--20K	Output S.P.L. $\pm 10\text{dB}$
7	Distortion 失真		%	3% Max.	At 1.0KHz , 0.1W
8	Voice Coil 音圈		mm		
9	Magnet 磁石		mm	\varnothing 12.5 x 1.5	Nd-Fe-B (鈹鐵錳)
10	Flux Density 磁通密度		Gauss		
11	Operating temp. 操作溫度		$^{\circ}\text{C}$	-40 ~ +100	
12	Buzzer & Rattle 異常音				Not be audible at 2.83V sine wave between Fo ~ 20KHz 輸入 2.83V 正弦波從 Fo 到 20KHz 之間無異常音
13	Weight 重量		g	9.6	
14	Material 材質			Metal	
15	Environmental Protection Regulation 環保法規			RoHS 2.0	

C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線

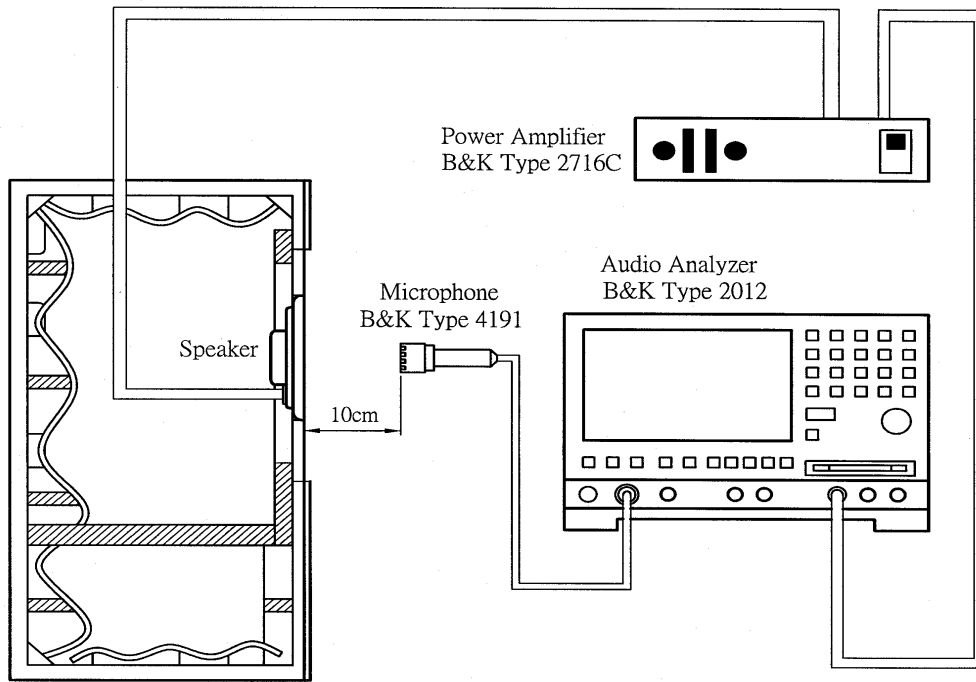


D. APPEARANCE DRAWING 外觀尺寸圖



Tol : ± 0.3
Unit: mm

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 焊錫附着性 (Spring Contact excepted) 彈 PIN 類不適用此項	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds. 端子部份浸入松香溶液 5 秒後,再浸入 $+270\pm 5^{\circ}\text{C}$ 熔融焊錫槽中 3 ± 1 秒。	90% min. lead terminals shall be wet with solder. (Except the edge of terminal) 浸入端子部份附着焊錫 90%以上.(末端斷面不算)
2	Soldering Heat Resistance 焊錫耐熱性 (Spring Contact excepted) 彈 PIN 類不適用此項	Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of $+260\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds. 距離端子根部 1.5mm 的位置,浸入 $+260\pm 5^{\circ}\text{C}$ 的焊錫槽 3 ± 1 秒。	No interference in operation 操作上無任何不良
3	PCB Wire Pull Strength PCB 線材拉力	The pull force shall be applied to double lead wire : Horizontal 3.0N(0.306kg) for 30 seconds. 雙線材水平方向施以 3.0N(0.306kg) 的力量,30 秒。	No damage and cutting off. 線材不鬆動,不脫落。
4	Random vibration 随机振动	Random vibration (Based on MIL STD 781C) PSD tol $\pm 3\text{dB}$; 30min/plane 20Hz \rightarrow 0.013g ² /Hz 20-80Hz \rightarrow +3dB/octave 80-350Hz \rightarrow 0.053g ² /Hz 0.35-2kHz \rightarrow -3dB/octave 2kHz \rightarrow 0.009g ² /Hz 依據標準 MIL STD 781C,試驗方向:XYZ 三軸向 試驗時間:30 分鐘/軸向,共 90 分鐘	No obstacle to be harmful to normal operation; damages, cracks, rusts and distortions. Should not be audible at 2.83V sine wave between Fo ~ 20KHz 測試後無任何障礙防礙正常操作.且在輸入 2.83V 正弦波從 Fo 到 20KHz 之間無異常音
5	Mechanical shock 机械冲击	Half sine wave pulse 3000g $\pm 15\%$, 0.3ms $+20\%/-0$ All axis direct ^o (6shocks) 波形:半正弦波,加速度: 3000g $\pm 15\%$,脉寬: 0.3ms $+20\%/-0$,衝擊次數:1 次/軸向,共 6 次。	

G. ENVIRONMENTAL TEST 環境試驗

No.	Item	Test conditions	Evaluation standard
1	Humidity test 高溫高濕測試	After being placed in a chamber at +85°C and 95% RH relative humidity for 120 hours. 置於+85°C, 相對濕度 95%環境中 120 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 2.83V sine wave between Fo ~ 20KHz. Fo should meet initial one. S.P.L. deviation of unit should be within ±3dB
2	Temp. shock test 溫度沖擊測試	(IEC 68-2-14) -40°C;+85°C,30min.dwell,20sec. transition, 32 cycles 依據(IEC 68-2-14) 於-40°C~+85°C 各 30 分鐘共 32 個循環	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 2.83V 正弦波從 Fo 到 20KHz 之間無異常音. Fo 與原規格值相同,輸出音壓變化量在±3dB 內.

H. Recommended Temperature Profile For Hand Soldering 建議手焊溫度

Hand Soldering
370±10°C / 3±1 Sec

I. RELIABILITY TEST 信賴性試驗

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	1.0W pink noise is applied for 96 hours, at 85°C 在 85°C下,輸入功率 1.0W, 粉雜音連續操作 96 小時.	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 2.83V sine wave between Fo ~ 20KHz. 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 2.83V 正弦波從 Fo 到 20KHz 之間無異常音. Fo 與原規格值相同,輸出音壓變化量在±3dB 內.

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
Judgment 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

J. PACKING STANDARD 包裝規格

