

SPECIFICATION FOR APPROVAL

承 認 書

Description : Electret Condenser Microphone

Kingstate Part No. : KEAG45NPF-W

Customer's Model No. : _____

Specification No. : MKS-7065

Number Of The Edition : 1.4

CUSTOMER'S APPROVED SIGNATURE		

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

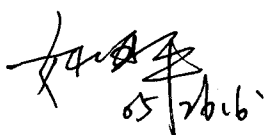
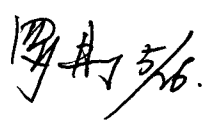
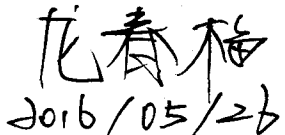


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Approved by	Checked by	Issued by
 05/2016	 5/26	 2016/05/26

A. SCOPE 範疇

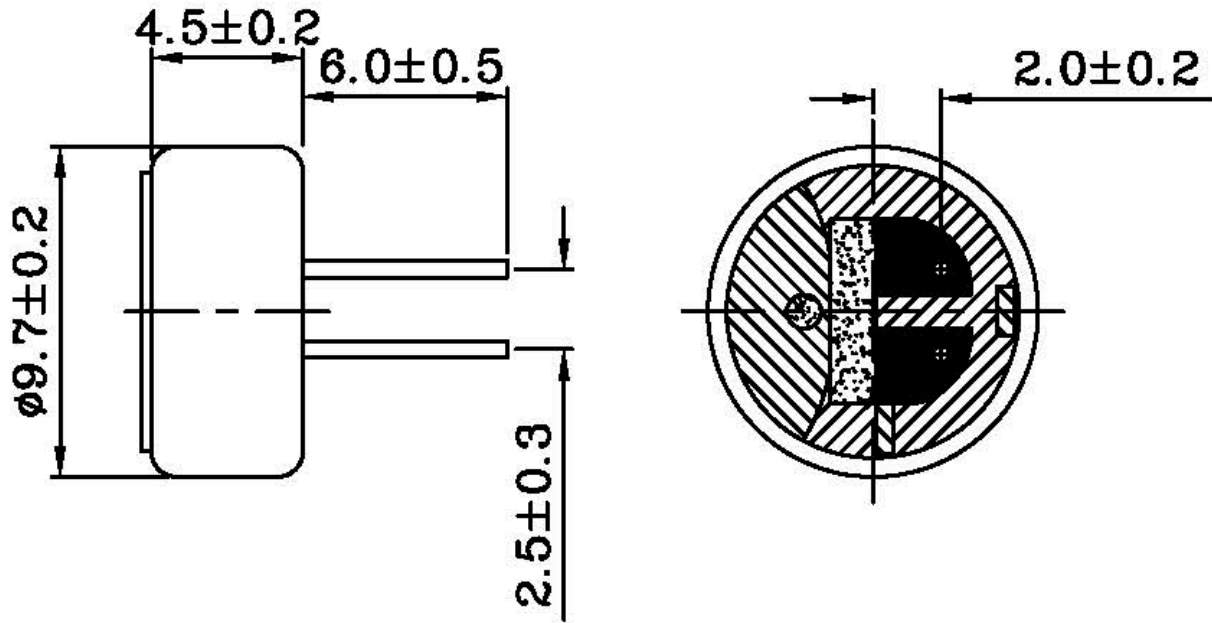
This specification applies electret condenser microphone, **KEAG45NPF-W**

此規格書適用於電容式麥克風 **KEAG45NPF-W**

B. SPECIFICATION 規格

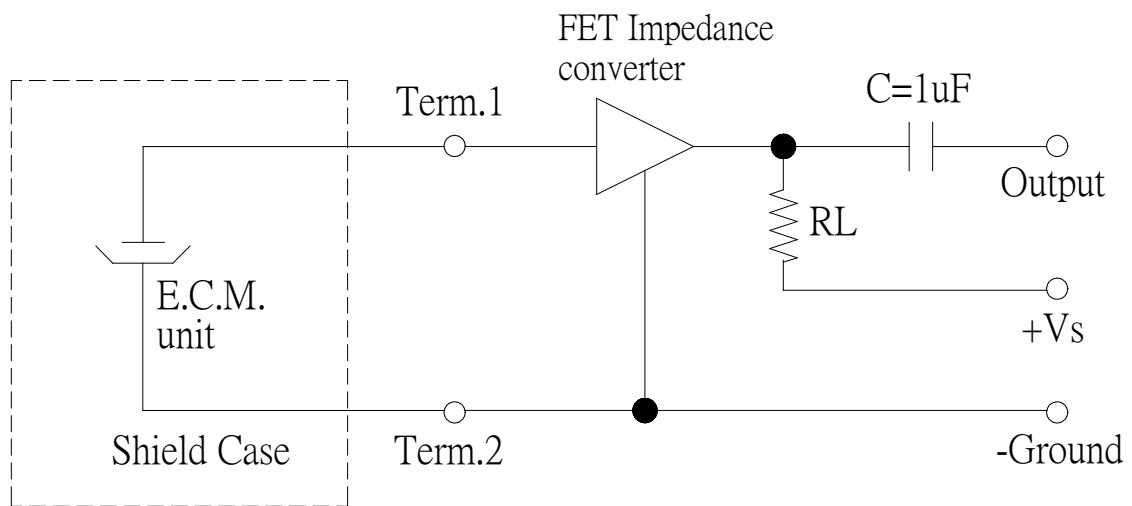
No.	Item	Symbol	Unit	Specification	Condition
1	Directivity 方向性			Omnidirectional 全指向	
2	Sensitivity 靈敏度	S	dB	-	
3	Standard operating voltage 標準操作電壓	Vs	V D.C.	-	
4	Output impedance 輸出阻抗	Zout	Ω	-	
5	Max operating voltage 最大操作電壓		V D.C.	-	
6	Sensitivity reduction 減電壓靈敏度	$\Delta S-Vs$	dB	-	
7	Frequency 頻率	f	Hz	20 ~ 10,000	
8	Max. current consumption 最大耗電流	IDSS	mA	0.5	
9	Signal to noise ration 訊號對雜音比	S/N	dB	-	
10	Operation temp. 操作溫度		$^{\circ}C$	-20 ~ +70	
11	Storage temp. 儲存溫度		$^{\circ}C$	-20 ~ +70	
12	Dimension 尺寸		mm	$\Phi 9.7 \times 4.5$	See appearance drawing 請參照外觀尺寸圖
13	Weight (MAX) 重量		gram	0.63	
14	Material 材質			AL 鋁	
15	Terminal 端子			Pin type (鍍錫/Plating Sn)	See appearance drawing 請參照外觀尺寸圖
16	Environmental Protection Regulation 環保法規			HSF	

C. APPEARANCE DRAWING 外觀尺寸圖



Unit: mm

D. MEASUREMENT CIRCUIT 測量線路



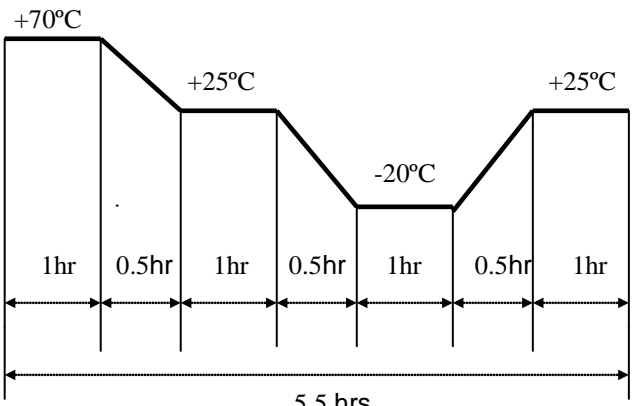
Schematic Diagram

$R_L = 2.2 K \Omega$

E. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	Soldering Heat Resistance 焊錫耐熱性	Lead terminal are immersed in soldering bath of $+270\pm 5^{\circ}\text{C}$ for 2 ± 0.5 second. 端子部份浸入以 $+270\pm 5^{\circ}\text{C}$ 焊錫槽中 2 ± 0.5 秒。	No interference in operation 操作無任何不良
2	Terminal Mechanical Strength 端子強度	Apply the terminal with 4.9N(0.5kg) strength for 30 second. 對端子施以 4.9N(0.5kg) 力量 30 秒。	No damage and cutting off 端子不鬆動, 不脫落
3	Vibration Test 振動測試	The part 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。	After any tests, the sensitivity to be within $\pm 3\text{dB}$ 測試其靈敏度須與原測試值的差異不超過 $\pm 3\text{dB}$ 。
4	Drop Test 落下測試	The part unit without packaged must be subjected to each 3 drops at three axes from the height of 1 meter to 20 mm thick wooden board. 未包裝麥克風單體從 1 公尺高處, X.Y.Z.3 個方向, 各 3 回, 落於 20mm 厚木板上。	


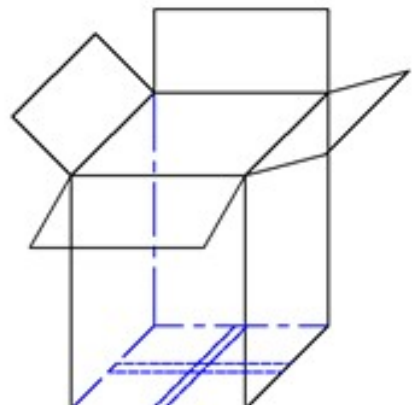
F. ENVIRONMENTAL TEST 環境試驗

No.	Item	Test conditions	Evaluation standard
1	High temp. test 高溫測試	After being placed in a chamber at $+70^{\circ}\text{C}$ for 72 hours. 置於 $+70^{\circ}\text{C}$ 環境中 72 小時	
2	Low temp. test 低溫測試	After being placed in a chamber at -20°C for 72 hours. 置於 -20°C 環境中 72 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at $+40^{\circ}\text{C}$ and 90 $\pm 5\%$ relative humidity for 240 hours. 置於 $+40^{\circ}\text{C}$, 相對濕度 90 $\pm 5\%$ 環境中 240 小時	
4	Temp. cycle test 溫度循環測試	The part shall be subjected to 10 cycles. One cycle shall be consist of: 單體承受溫度循環測試 10 次, 其循環內容如圖示: 	After any tests, the sensitivity to be within $\pm 3\text{dB}$ of initial sensitivity after 6 hours of conditioning at $+25^{\circ}\text{C}$ 經測試後麥克風, 須靜置於 $+25^{\circ}\text{C}$ (室溫) 環境中 6 小時後. 測試其靈敏度須與原規格的差異不超過 $\pm 3\text{dB}$ 。

TEST CONDITION.

Standard Test Condition	: a) Temperature : $+5 \sim +35^{\circ}\text{C}$	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
一般測試條件	: a) 溫度 : $+5 \sim +35^{\circ}\text{C}$	b) 濕度 : 45-85%	c) 氣壓 : 860-1060mbar
Judgement Test Condition	: a) Temperature : $+25 \pm 2^{\circ}\text{C}$	b) Humidity : 60-70%	c) Pressure : 860-1060mbar
爭議時測試條件	: a) 溫度 : $+25 \pm 2^{\circ}\text{C}$	b) 濕度 : 60-70%	c) 氣壓 : 860-1060mbar

G. PACKING STANDARD 包裝規格

	DRAWING	QTY (PCS)	SIZE(mm)
INNER BOX		100	100X100X14.5
OUTER BOX		5000 (100X50)	210X 210X 280

①	Inner Box	100mm×100mm×14.5mm	1×100PCS
②	Carton Box	210mm×210mm×280mm	100×50