

SPECIFICATION FOR APPROVAL

仕 樣 書

Description : Speaker BOX

Kingstate Part No. : KBAG3020008X-BOX2

Customer's Model No. : _____

Specification No. : POD-7747

Number Of The Edition : 1.1

CUSTOMER'S APPROVED SIGNATURE		



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Approved by	Checked by	Issued by
	 22.07.18	FAN 2022.07.12

KINGSTATE ELECTRONICS CORPORATION

志豐電子股份有限公司

變更履歷表

圖號 Drawing no. : POD-7747	機種 P/N: KBAG3020008X-BOX2		
變更日期 Date modified	提出者 Applied	版本 Edition	變更內容 Modified content
2022.07.12	鐘燦培	1.1	規格書建立

A. SCOPE 範疇

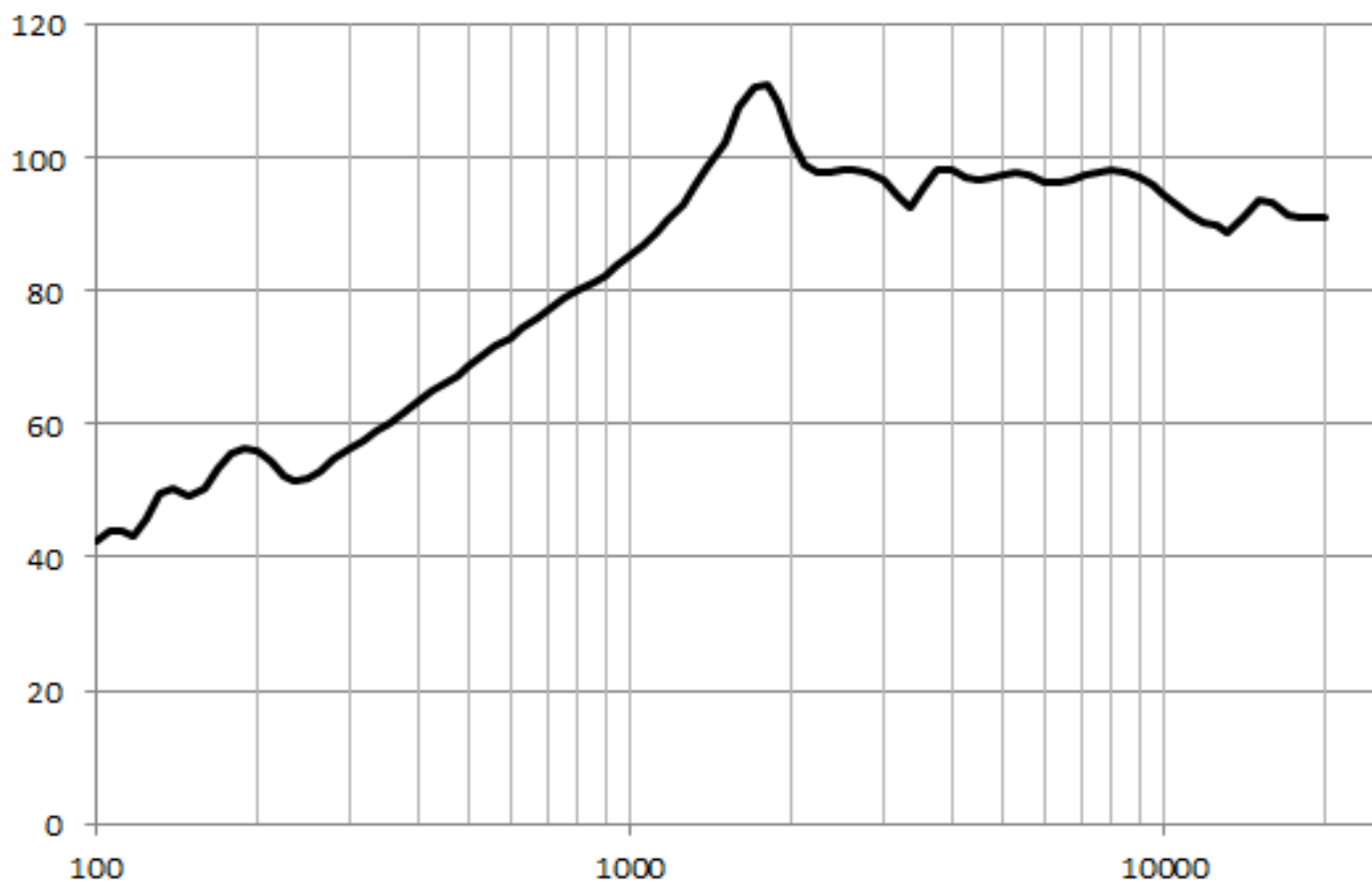
This specification applies speaker, **KBAG3020008X-BOX2**

此規格書適用於喇叭, **KBAG3020008X-BOX2**

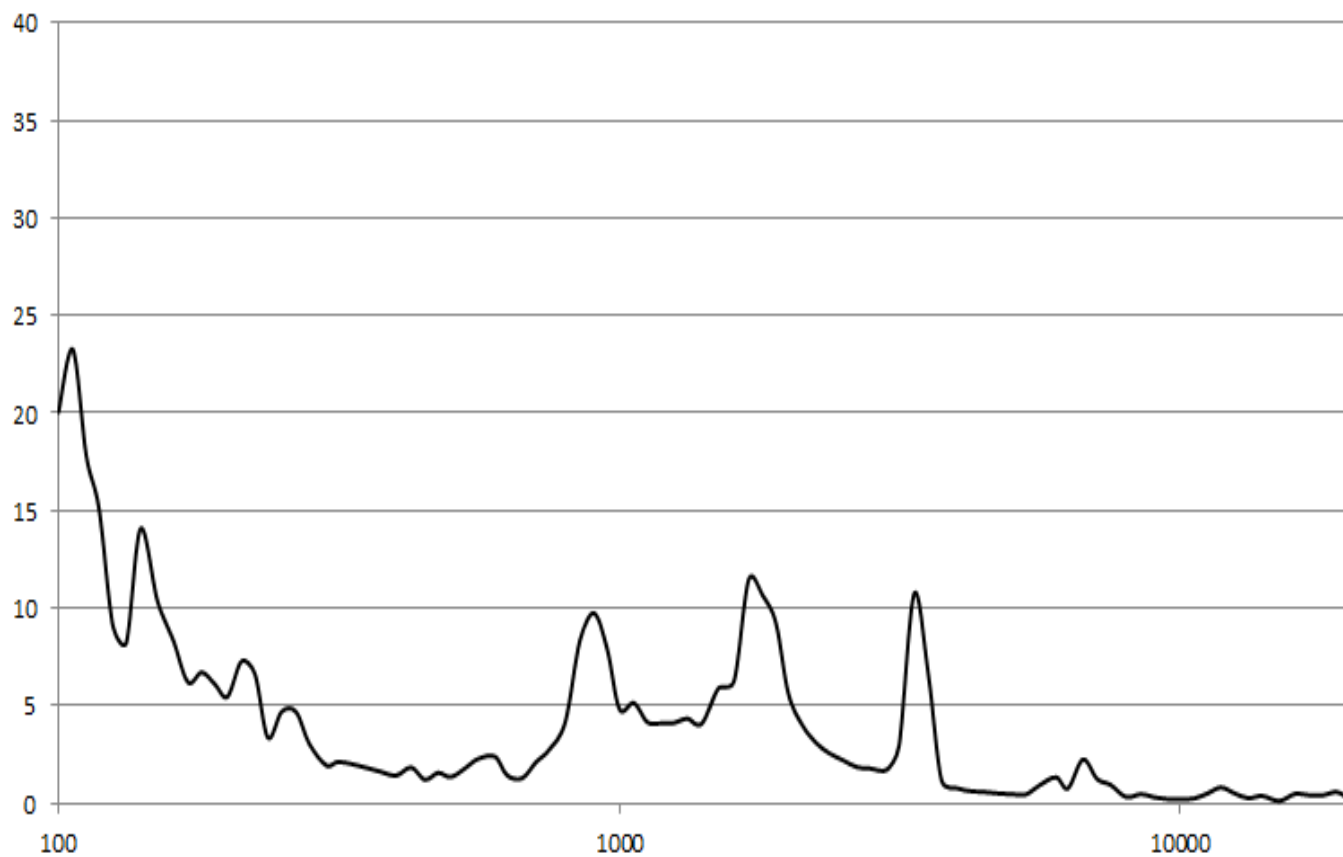
B. SPECIFICATION 規格

No.	Item	Symbol	Unit	Specification	Condition
1	Dimension 尺寸		mm	L30*W20*H6.5	
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 2kHz 1.0V
4	Resonance Frequency 低音諧振	Fo	Hz	$1600 \pm 20\%$	At ,1.0V
5	Output S.P.L. 音壓位準		dB	$98 \pm 3dB(1W/0.1m)$	At1.0、1.2、1.5、2.0KHz (Average figures)
6	Frequency Rang 有效頻寬		Hz	Fo---20K	Output S.P.L. $\pm 10dB$
7	Distortion 失真		%	10% Max.	At 2.0kHz
8	Voice Coil 音圈		mm		
9	Magnet 磁石		mm	N/A	Nd-Fe-B(鈹鐵錳)
10	Flux Density 磁通密度		Gauss		
11	Operating temp. 操作溫度		°C	-40 ~ +85	
12	Storage temp. 儲存溫度		°C	-40 ~ +85	
13	Buzzer & Rattle 異常音				Not be audible at 2.83V sine wave betweenFO ~ 20KHz 輸入 2.83V 正弦波從 FO 到 20KHz 之間無異常音.
14	Weight 重量		g		
15	Material 材質			Plastic	
16	Environmental Protection Regulation 環保法規			RoHS2.0	

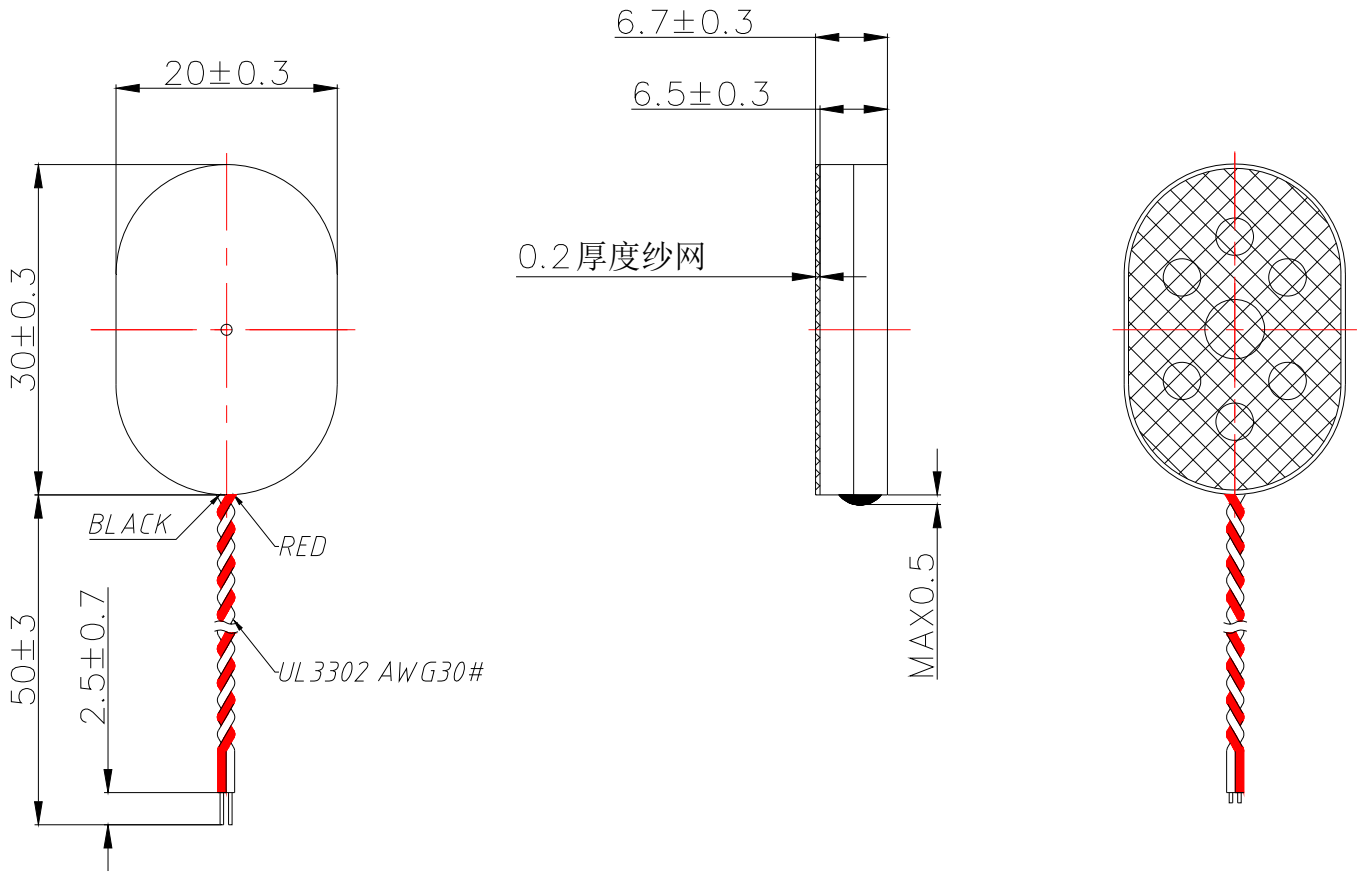
C. TYPICAL FREQUENCY RESPONSE CURVE 頻率響應曲線



D. THD CURVE 失真曲綫

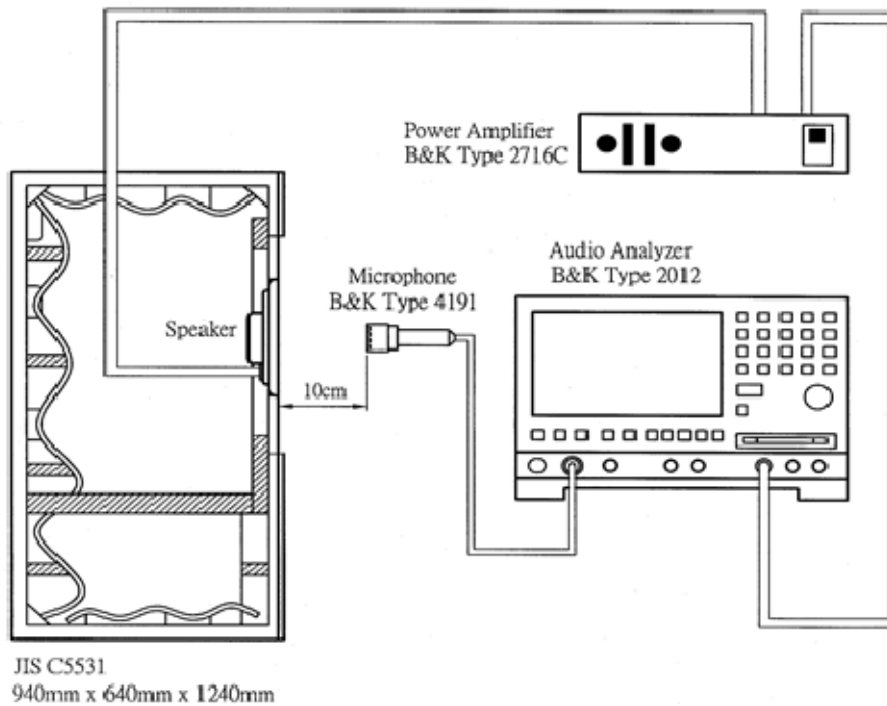


E. APPEARANCE DRAWING 外觀尺寸圖



Tol: ± 0.3
Unit: mm

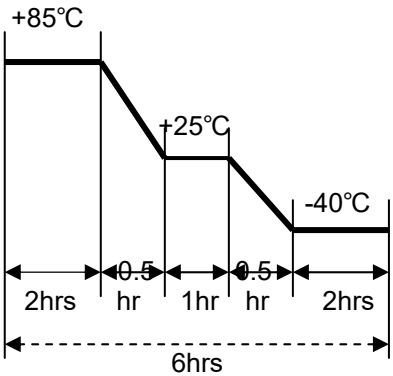
F. MEASUREMENT CIRCUIT 測量線路



G. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test condition	Evaluation standard
1	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. 不鬆動,不脫落.
2	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 2.83V sine wave between FO ~ 20KHz
3	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 2.83V 正弦波從 FO 到 20KHz 之間無異常音.

H. 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 +85°C for 500 hours 置於+85°C環境中 500 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 $\pm 3\text{dB}$
2	Low temp. Test 低溫測試	After being placed in a chamber at -40°C for 500 hours. 置於-40°C環境中 500 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40°C and 90 \pm 5%RH relative humidity for 96 hours. 置於+40°C, 相對濕度 90 \pm 5%環境中 96 小時	
4	Temp. cycle test 溫度循環測試	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: 	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 $\pm 3\text{dB}$ 內.

I. RELIABILITY TEST 信賴性試驗

No.	Item	Test conditions	Evaluation standard
1	Load test 連續負荷	1W white noise is applied for 1000 hours, at room temp. 在室溫下,輸入功率 1 W, 白雜音連續操作 1000 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.

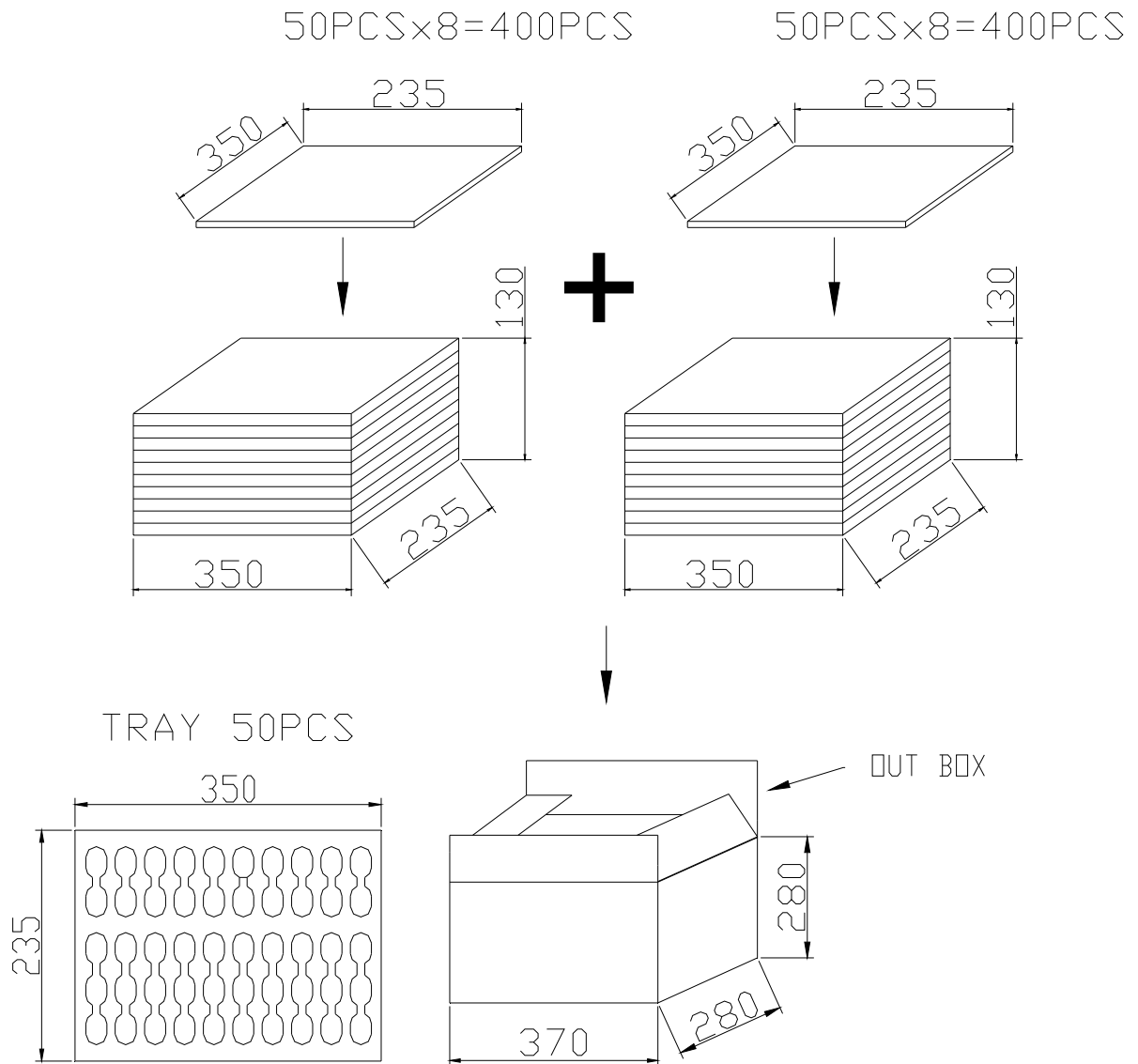
TEST CONDITION.

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

Hand Soldering
370±10°C / 3±1 Sec

K.PACKING STANDARD 包裝規格



TRAY	350X235X11mm	1X50PCS=50PCS
CARTON BOX	370X280X280mm	16X50PCS=800PCS