

# Product Specification Sheet

**Part no 型號** : SP40-16-5L6.3-P4B-R

**Description 品名** : 40mm Mylar Speaker – Internal Magnet Type  
40mm 喇叭 - 內磁式

**Customer's name 客戶名稱** : 同乐电子

**Customer's part No 客戶型號** : #11+43040651-2

**Project no. 項目編號** :

**Specification sheet no 規格書編號** : RY15SSD0506

**Page 頁數** : 1/ 5 (total no. of page 總頁數 : 5 )

<b>Made by</b> :	<b>Approved by</b> :	<b>Version</b> :	<b>Date</b> :
HEI	PING	1st	15-01-2018

## Specification Sheet 規格書

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**1) Mechanical Feature 機械特性**

1.1 Dimensions 外觀尺寸	Diameter 直徑:	Ø40mm -0.5mm
	Overall height 總高:	6.3mm ±0.3mm
1.2 Frame 盆架	Material 材質:	Plastic 塑膠(ABS)
	Color 顏色:	Green 綠色
1.3 Diaphragm 振膜	Material 材質:	PET - Radial 黑花膜
	Color 顏色:	Black 黑色
1.4 Surround 折環	Material 材質:	N/A
	Color 顏色:	N/A
1.5 Voice coil 音圈	Diameter 直徑:	Ø10.4mm
	Bobbin 骨管:	N/A
1.6 Magnet 磁石	Material 材質:	NdFeB 釹鐵硼
	Dimensions 尺寸:	Ø9.5 x 1.5 mm
1.7 Weight 重量	Overall 總重:	

**2) Electro-acoustic Feature 電聲特性**

2.1 Rated Impedance(Z) 額定阻抗	16 ohm ±15%
2.2 Voice Coil Resistance(Re) 音圈直流電阻	14.4 ohm ±15%
2.3 Resonance Frequency(Fo) 共振頻率	470Hz ±20%
2.4 Sensitivity(S.P.L.) 靈敏度 (@0.1w/0.1m)	89dB ±3dB (800, 1k, 1.2k, 1.5kHz average 平均)
2.5 Rated Power 額定功率	0.25w
2.6 Peak Power 峰值功率	0.5w
2.7 Frequency Range 頻率響應範圍	Fo~4.5kHz
2.8 Distortion 失真率	< 5%
2.9 Buzz & Rattle 異常音	Must be normal 必需正常 (Sine wave 正弦波@ rated power 額定功率)
2.10 Polarity 極性	N/A

**3) Environmental Standard**

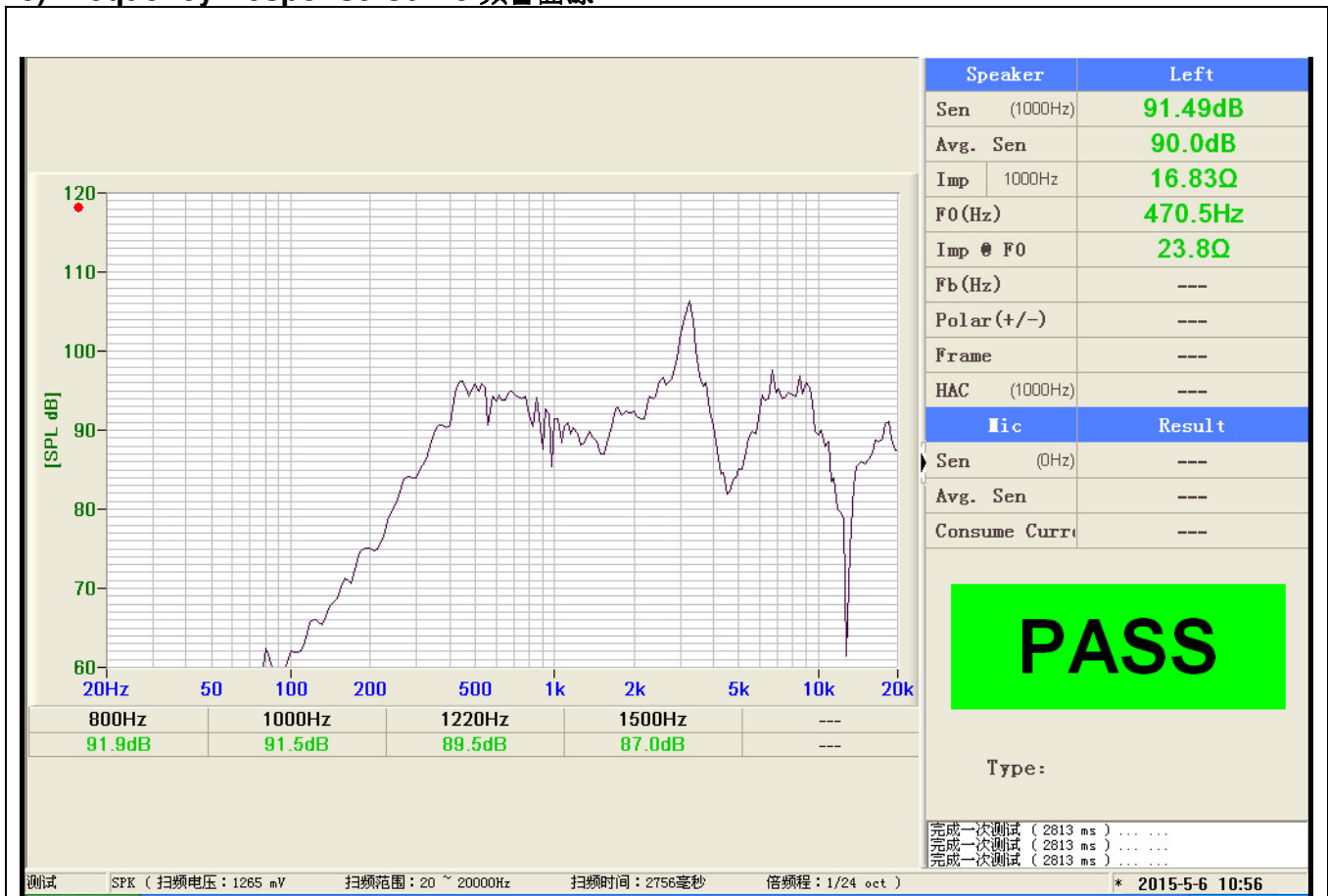
3.1 RoHS (2011/65/EU)	Comply with
3.2 18 Phthalates	Comply with

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4) Reliability Feature 可靠特性

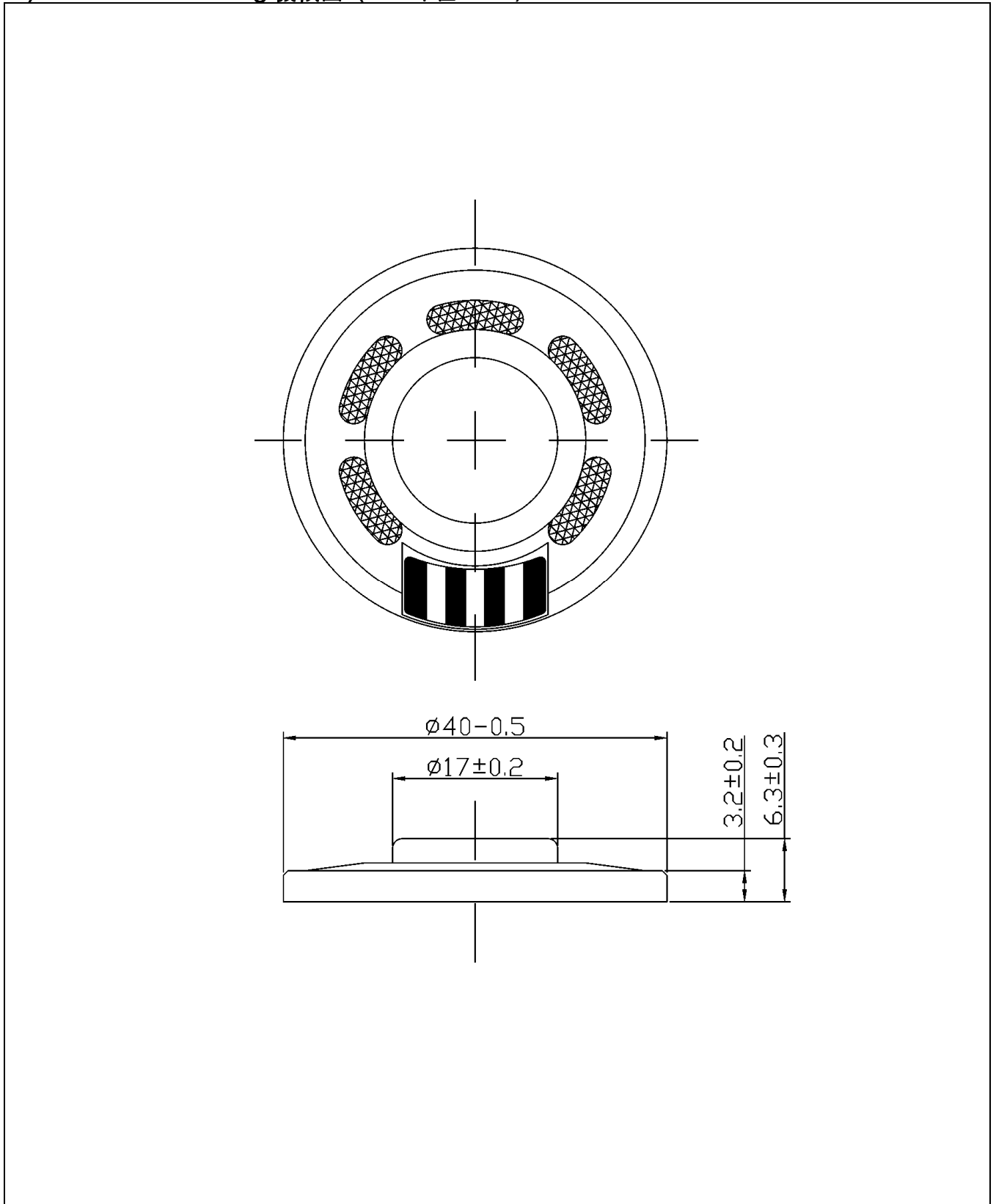
Item 項目	Feature 特性	Condition 條件
4.1 Load test 負載測試	Must be normal 必需正常	White noise 白噪聲 @2V For 24 Hours 小時
4.2 Heat test 耐熱測試 (Storage 儲存)	Must be normal 必需正常	+55°C ±2°C / R.H. 20-25% For 16 hours 小時
4.3 Cold test 耐寒測試 (Storage 儲存)	Must be normal 必需正常	-25°C ±2°C For 16 hours 小時
4.4 Humidity test 耐濕測試 (Storage 儲存)	Must be normal 必需正常	+40°C ±2°C / R.H. 90-95% For 48 hours 小時
4.5 Vibration test 振動測試	Must be normal 必需正常	Frequency: 10~50~10Hz Amplitude: 1.0mm(P-P) 2 hrs 小時
4.6 Drop Test 跌落測試	Must be normal 必需正常	Slide down from a board in 75° angle at height 1.5m for 3 times 在 1.5 米高度 75° 斜板滑落 3 次後外觀和功能正常

5) Frequency Response Curve 頻響曲線



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6) Mechanical Drawing 機械圖 (unit 單位 : mm)



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## 7) Notes for Using the Speaker 使用喇叭須知

### 7.1 Note for picking up and placing speaker 撿取與放置喇叭須知

- a. Do not let the diaphragm of a speaker be pressed by finger(s) or nail(s) when picking up or holding a speaker in all circumstances. Always pick up the speaker by holding the rim of the frame.

無論任何情況，撿取或持著喇叭時手指及指甲等都不可按壓到喇叭膜片，只可捏著盆架邊緣把喇叭提起。

- b. Do not let the speakers cluster together when they have been taken away from the poly foam box or at the state of work in process. This may lead the speakers to attract each other due to their magnetic attraction and thus may cause the depression in the diaphragm and the broken circuit of the voice coil.

已從包裝泡沫盒提出的喇叭或已裝配成半制品的喇叭，都絕不能讓其堆疊一起，這會造成喇叭因本身的磁力使互攝在一起的現象，並會導致膜片被壓凹及造成音圈斷路。

### 7.2 Note for function test before assembly 裝配前功能測試須知

The electrical charge feeding to the speaker should apply to the contact points which have been soldered already so as to avoid improper judgment in malfunction due to the phenomenon of bad contact.

饋給喇叭測試電荷的電極棒應直接觸及接線板上已上錫的位置上進行，以避免因接觸不良現象而導致誤判喇叭為沒功能的情況出現。

### 7.3 Note for Soldering 焊接須知

- a. Please use the soldering iron with the power not more than 40W to solder.

請使用 40W 以下的小型烙鐵進行焊接。

- b. Temperature of soldering should be between  $350^{\circ}\text{C}\pm 10^{\circ}\text{C}$ .

焊接溫度應界乎  $350^{\circ}\text{C}\pm 10^{\circ}\text{C}$ 。

- c. Duration of soldering should not exceed 2 second.

焊接時間不應超過 2 秒。

## 8) Revision Record 變更記錄

No 序號	Date 日期	Content of change 變更內容	Reason 變更理由	Page(s) revised 變更頁	Signature of revision 修改人員
1					
2					
3					
4					