

	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL	
	PAGE	1 / 8		WWW.OWOLFF.COM	
	HK	MODEL NAME: OWMB-858530S-27-25			Rev.01

SPECIFICATION FOR APPROVAL

SMD Electro-Magnet Transducer

Model Number	OWMB-858530S-27-25
Noted	RoHS Compliant

		DRAWN	CHECKED	APPROVED
CUSTOMER	SIGN			
OLE WOLFF	SIGN			

REVISION NOTES:

Date	Rev. No.	Description of Revision
2021-08-24	01	1. The width of carrier tape is changed from 16mm to 24mm 2. The inner and outer boxes are changed accordingly

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	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL	
	PAGE	2 / 8		WWW.OWOLFF.COM	
	<i>HK</i>	<i>MODEL NAME: OWMB-858530S-27-25</i>			<i>Rev.01</i>

1. SCOPE

THIS SPECIFICATION IS APPLIED TO OLE WOLFF SMD ELECTRO-MAGNET TRANSDUCER UNIT OF
MODEL: OWMB-858530S-27-25

2. GENERAL REQUIREMENTS

OPERATING TEMPERATURE RANGE: -20°C □
+70°C STORAGE TEMPERATUR RANGE: -30°C □
+80°C

3. MECHANICAL LAYOUT & DIMENSIONS

DIMENSIONS: SHOWN IN FIGURE 3. WEIGHT:
0.5g

4. ELECTRICAL CHARACTERISTICS

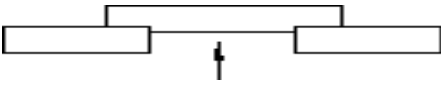
NO.	ITEM	SPECIFICATION
1	MODEL NO.	OWMB-858530S-27-25
2	RATED VOLTAGE	3V
3	OPERATING VOLTAGE	2~4V
4	RESONANT FREQUENCY	2700Hz
5	COIL RESISTANCE	16±3Ω
6	*SOUND PRESSURE LEVEL (at10cm)	Min. 85dB at Rated Voltage
7	*CURRENT CONSUMPTION	Max. 80mA at Rated Voltage
8	Case material and colour	LCP / Black

*Applying rated voltage (Resonant frequency, 1/2 duty, Square wave)

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	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL	
	PAGE	3 / 8		WWW.OWOLFF.COM	
	HK	MODEL NAME: OWMB-858530S-27-25			Rev.01

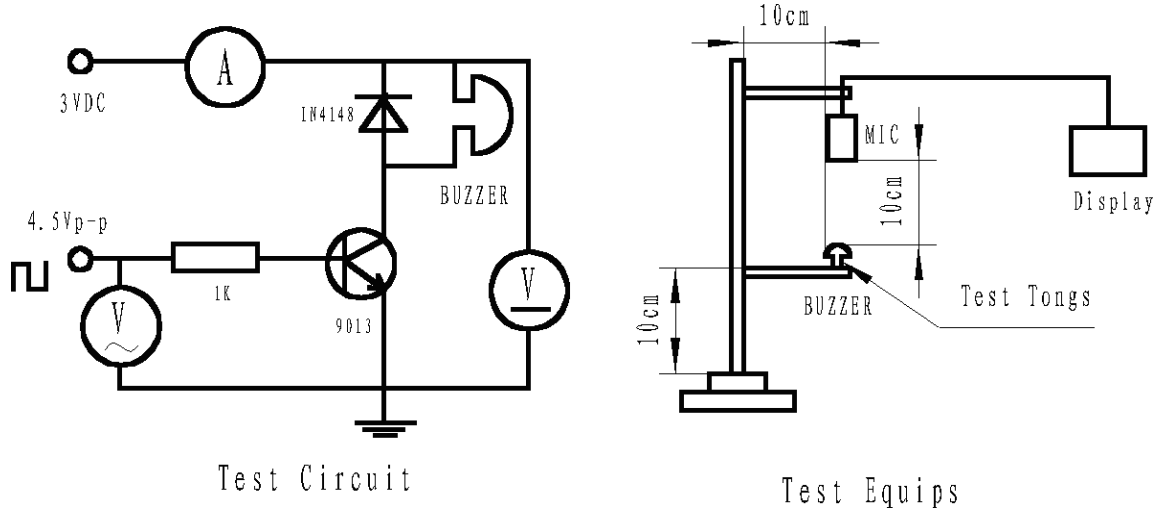
5. RELIABILITY TEST

-	AFTER TEST After the test the part shall meet specifications without any degradation in appearance and performance except SPL shall be initial value ± 10 dB or more.
5.1 HIGH TEMPERATURE STORAGE LIFE TEST	High temperature : +80°C Duration : 120 Hours
5.2 LOW TEMPERATURE STORAGE LIFE TEST	Low temperature : -30°C Duration : 120 Hours
5.3 TEMPERATURE CYCLE TEST	Temperature : -30 ± 2 °C \rightarrow 20 ± 5 °C \rightarrow +80 ± 2 °C \rightarrow 20 ± 5 °C Duration : 30 min 15 min 30 min 15 min Cycle : 5 cycles
5.4 HUMIDITY TEST	Temperature : 30 ± 2 °C Relative Humidity : 90~95% RH, Duration : 120 hours
5.5 Drop Test	Height : 700mm Drop Surface : 10mm thick wooden board Direction : 2 directions-upper and side of the part are to be applied
5.6 VIBRATION TEST	Power : 10Hz (1 minute) Amplitude : 1.52mm (9.3g) Total time : 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours
5.7 SHOCK TEST	Shock : 980m/s ² for each three mutually perpendicular directions to each of 3 times by half sine wave. Sounder shall be measured after this test.
5.8 LEAD PULL	Push Force : 9.8N Duration : 10 ± 1 seconds behind the part  After the test part shall meet specifications without any degradation in appearance and performance.
5.9 RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN	Shown in Fig.4
Warranty: For a period of one year from date of manufacture under normal operations.	

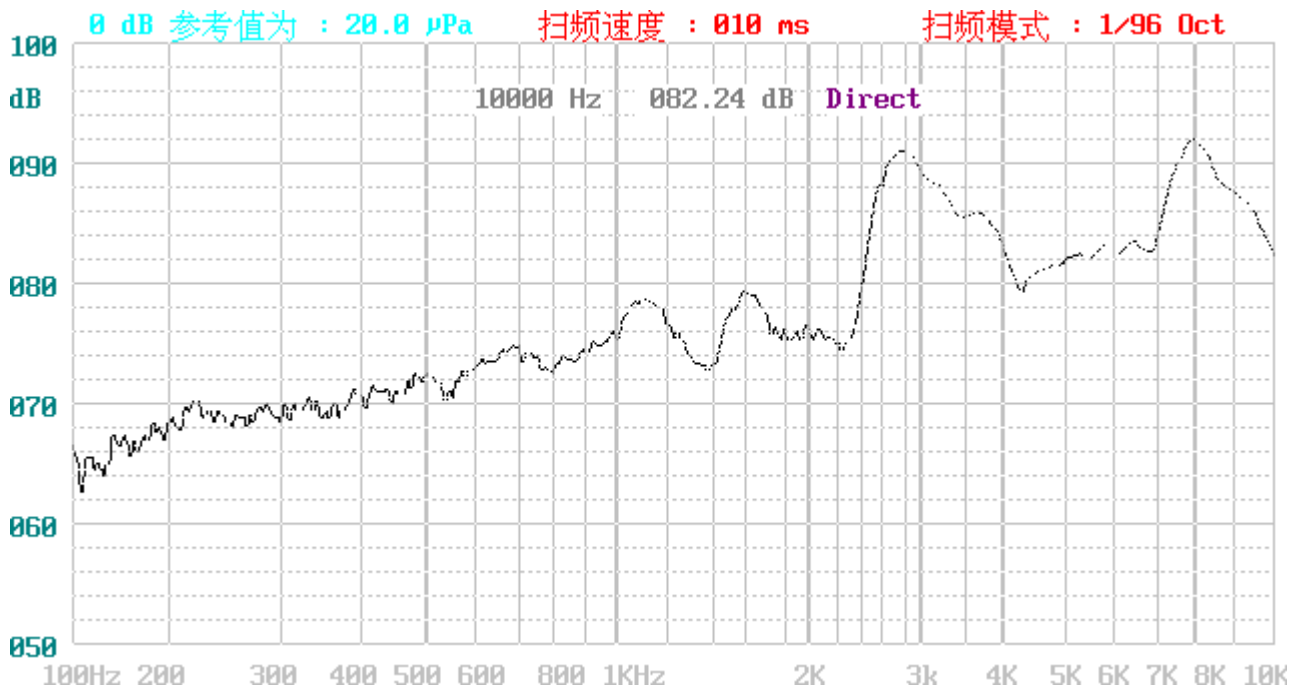
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	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL
	PAGE	4 / 8		WWW.OWOLFF.COM
	HK	MODEL NAME: OWMB-858530S-27-25		Rev.01

6. TEST METHOD (Figure 1)



7. FREQUENCY RESPONSE (Figure 2)



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	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL	
	PAGE	5 / 8		WWW.OWOLFF.COM	
	<i>HK</i>	<i>MODEL NAME: OWMB-858530S-27-25</i>			<i>Rev.01</i>

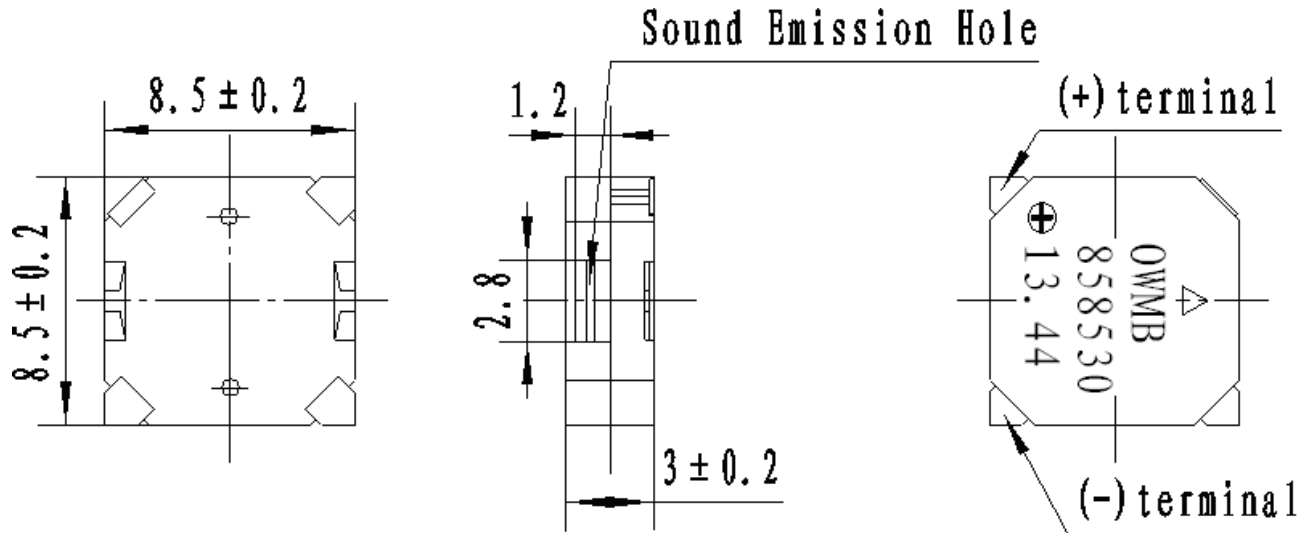
8. DIMENSIONS (Figure 3)

Tolerance: $\pm 0.5\text{mm}$ Except Specified Unit: mm

Marking Description

13.44 - Year. Calendar Week

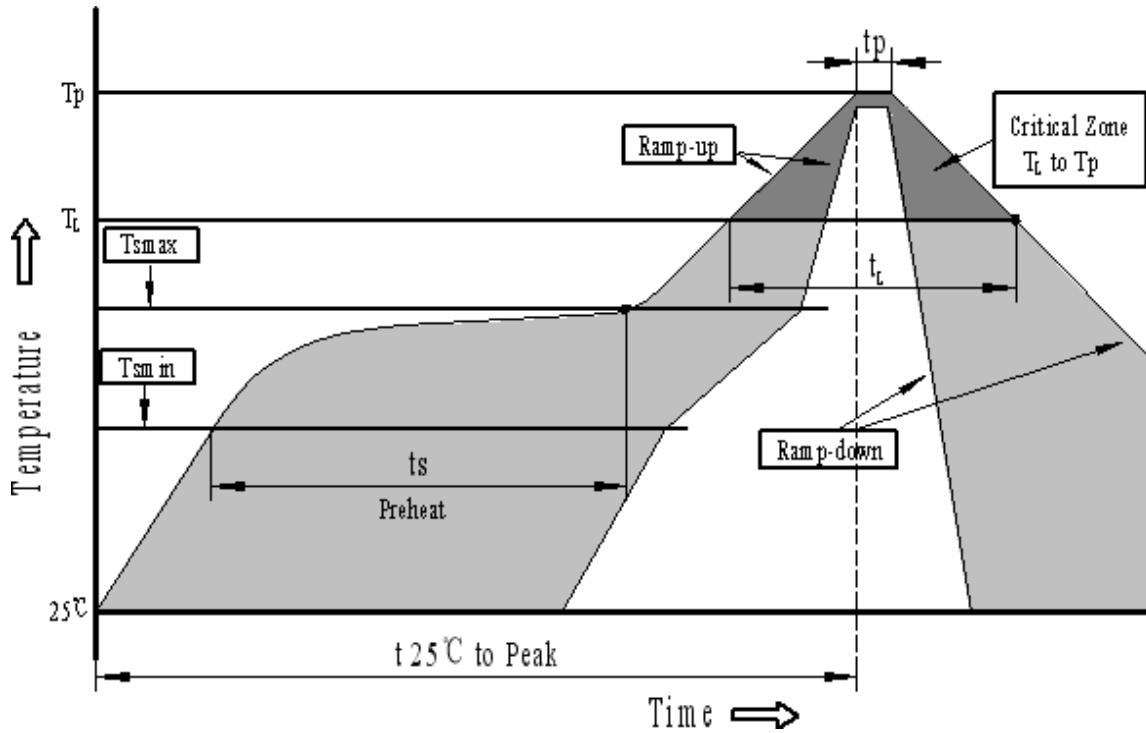
I.e. 13.44 - 2013, CW44



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	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL	
	PAGE	6 / 8		WWW.OWOLFF.COM	
	HK	MODEL NAME: OWMB-858530S-27-25			Rev.01

9. RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN (Figure 4)

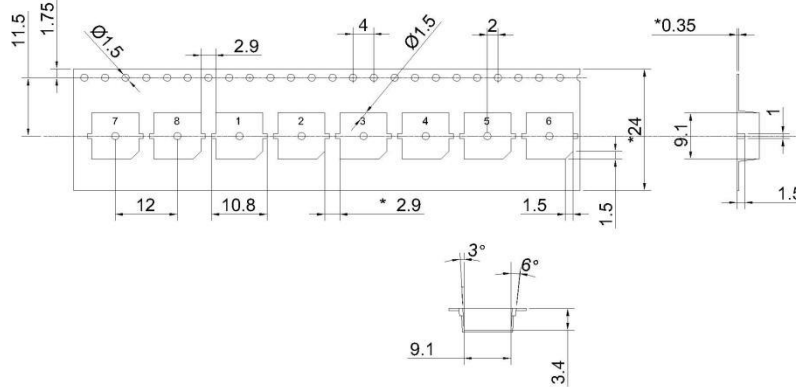


Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to T_p)	3°C/second max.
Preheat	
-Temperature Min.(T_{smin})	150°C
-Temperature Min.(T_{smax})	200°C
-Temperature Min.(t_s)	60 ~ 180 seconds
T_{smax} to T_L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature(T_L)	217°C
-Time(T_L)	60 ~ 150 seconds
Peak temperature(T_p)	250°C+0/-5°C
Time within 5°C of actual Peak temperature (t_p)	6 seconds max.
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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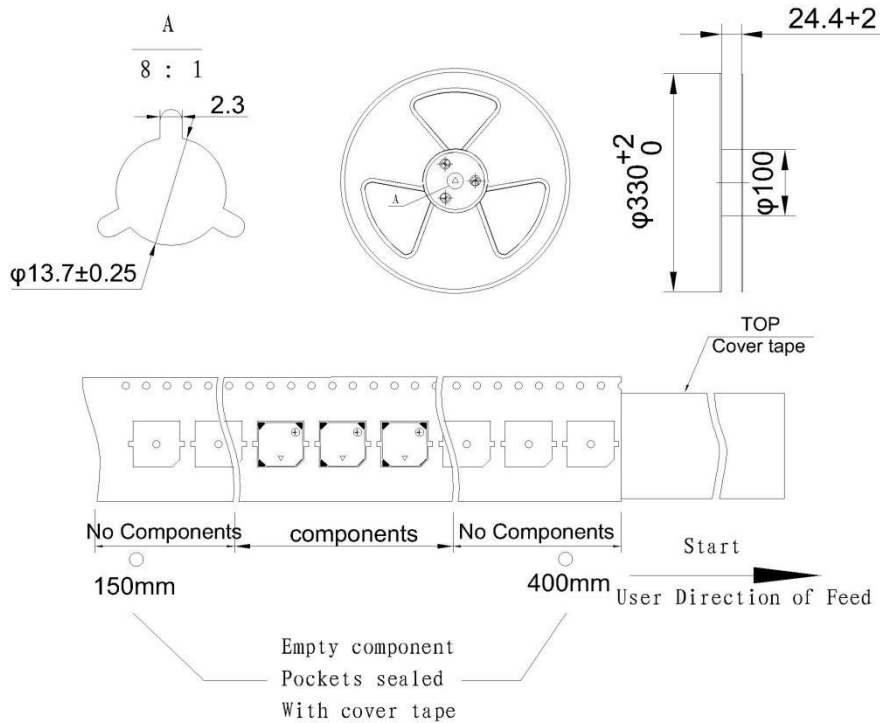
	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL
	PAGE	7 / 8		WWW.OWOLFF.COM
	HK	MODEL NAME: OWMB-858530S-27-25		Rev.01

10. PACKING (Figure 5)



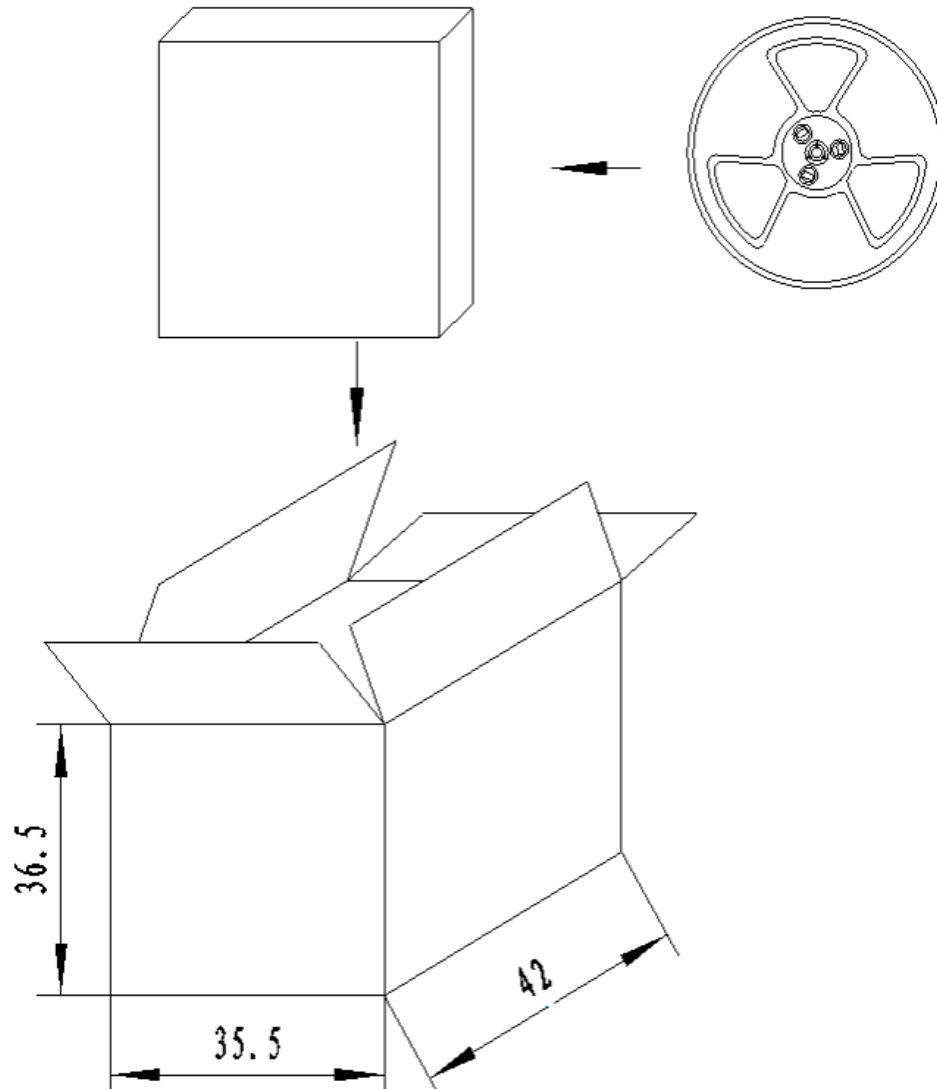
NOTE:

- 1.10 sprocket hole pitch cumulative tolerance +/-0.20mm.
- 2.All dimensions meet EIA-481-D requirements.
- 3.Thickness: 0.35+/-0.05mm.
- 4.Component loaded per 13.3"reel: 1000pcs.



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	DATE	24 Aug, 21	SPECIFICATION	OLE WOLFF INTERNATIONAL	
	PAGE	8 / 8		WWW.OWOLFF.COM	
	HK	MODEL NAME: OWMB-858530S-27-25			Rev.01



NOTES:

- 1.1000 PCS per box
- 2.Total 10 boxes per carton
- 3.Total 10000 PCS carton

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