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|  | DATE | 29 Jun, 15 | SPECIFICATION | OLE WOLFF INTERNATIONAL | |
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| | DK | MODEL NAME: OWMB-757525S-27-15A | | | Rev.2 |

SPECIFICATION FOR APPROVAL

SMD Electro-Magnetic Transducer

| | |
|--------------|---------------------|
| Model Number | OWMB-757525S-27-15A |
| Noted | RoHS Compliant |
| | |

| | | DRAWN | CHECKED | APPROVED |
|-----------|------|-------|---------|----------|
| CUSTOMER | SIGN | | | |
| OLE WOLFF | SIGN | | | |

REVISION NOTES:

| Date | Rev. No. | Description of Revision |
|-----------|----------|---|
| 2014-2-11 | 0 | Original Revision. |
| 2015-1-12 | 1 | Add P/N and Date Code on the product. |
| 2015-6-29 | 2 | Change the Sound Output from Min.85dB to 85~91dB. |

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1. SCOPE

THIS SPECIFICATION IS APPLIED TO OLE WOLFF SMD ELECTRO MAGNETIC TRANSDUCER UNIT OF MODEL: OWMB-757525S-27-15A

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 4.

WEIGHT:

4. ELECTRICAL CHARACTERISTICS

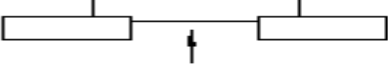
| NO. | ITEM | SPECIFICATION |
|-----|--------------------------|---------------|
| 1 | RATED VOLTAGE | 3V |
| 2 | OPERATING VOLTAGE | 2~4V |
| 3 | RESONANT FREQUENCY | 2700Hz |
| 4 | COIL RESISTANCE | 15Ω±3Ω |
| 5 | *SOUND OUTPUT (AT 10CM) | 85~91dB |
| 6 | * CURRENT CONSUMPTION | ≤100mA |
| 7 | CASE MATERIAL AND COLOUR | LCP / Black |

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

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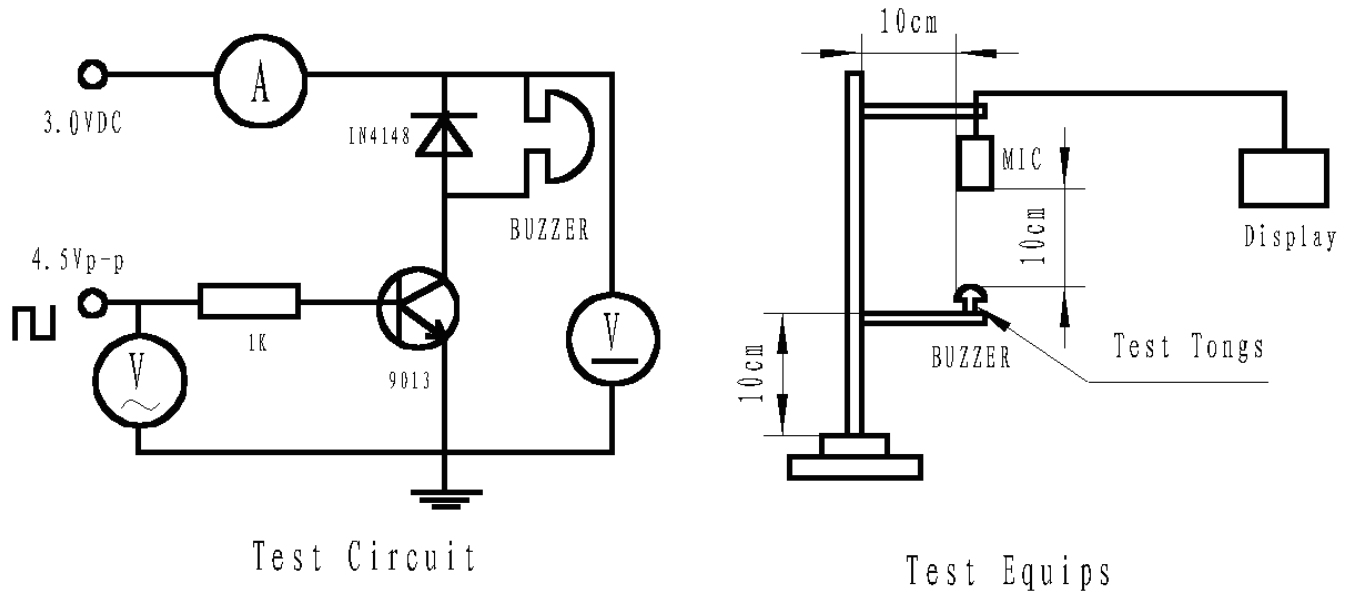
5. RELIABILITY TEST

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|---|
| - AFTER TEST After the test the part shall meet specifications without any degradation in appearance and performance except SPL shall be initial value $\pm 10\text{dB}$ or more. |
| 5.1 HIGH TEMPERATURE STORAGE LIFE TEST High temperature : $+80^{\circ}\text{C}$ Duration : 120Hours |
| 5.2 LOW TEMPERATURE STORAGE LIFE TEST Low temperature : -30°C Duration : 120 Hours |
| 5.3 TEMPERATURE CYCLE TEST Temperature : $-30\pm 2^{\circ}\text{C}$ → $20\pm 5^{\circ}\text{C}$ → $+80\pm 2^{\circ}\text{C}$ → $20\pm 5^{\circ}\text{C}$ Duration : 30 min 15 min 30 min 15 min Cycle : 5 cycles |
| 5.4 HUMIDITY TEST Temperature : $30\pm 2^{\circ}\text{C}$ 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 (sweep time) Amplitude : 1.52mm(9.3g) Direction : 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours |
| 5.7 SHOCK TEST Sounder shall be measured after being applied shock (980m/s^2) for each three mutually perpendicular directions to each of 3 times by half sine wave. |
| 5.8 LEAD PULL The part shall be pushed with a force of 9.8N for 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.3 |
| Warranty: For a period of one year from date of manufacture under normal operations. |

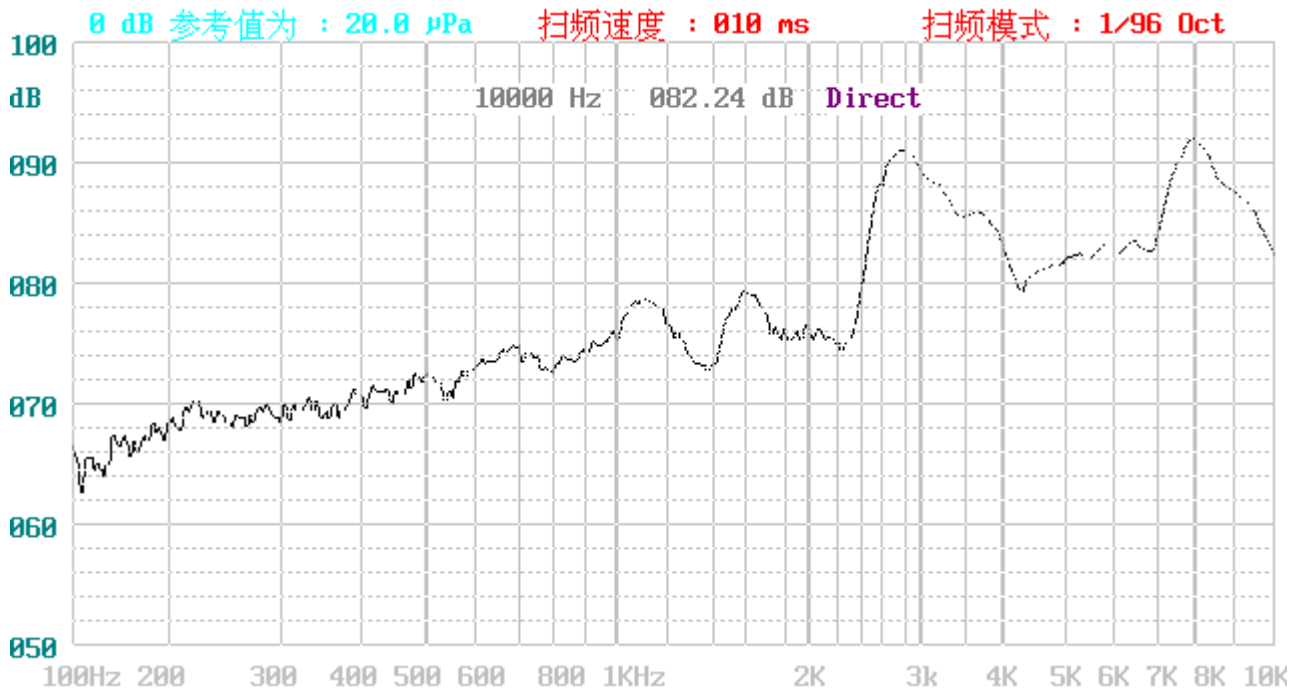
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6. TEST METHOD (Figure 1)



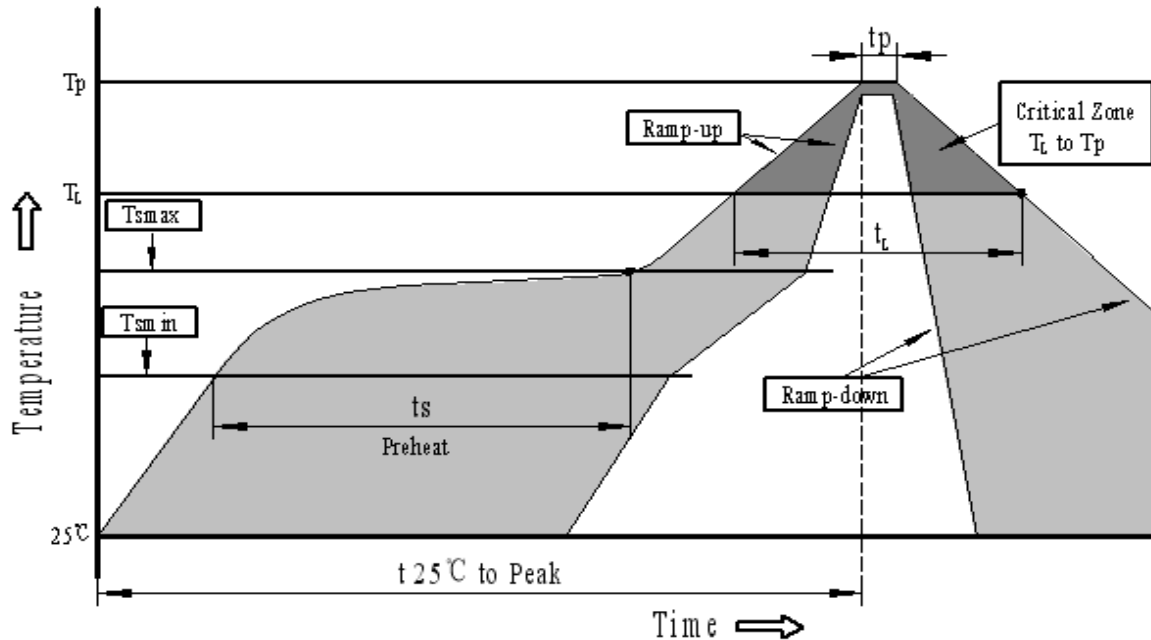
7. FREQUENCY RESPONSE (Figure 2)



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8. RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN (Figure 3)



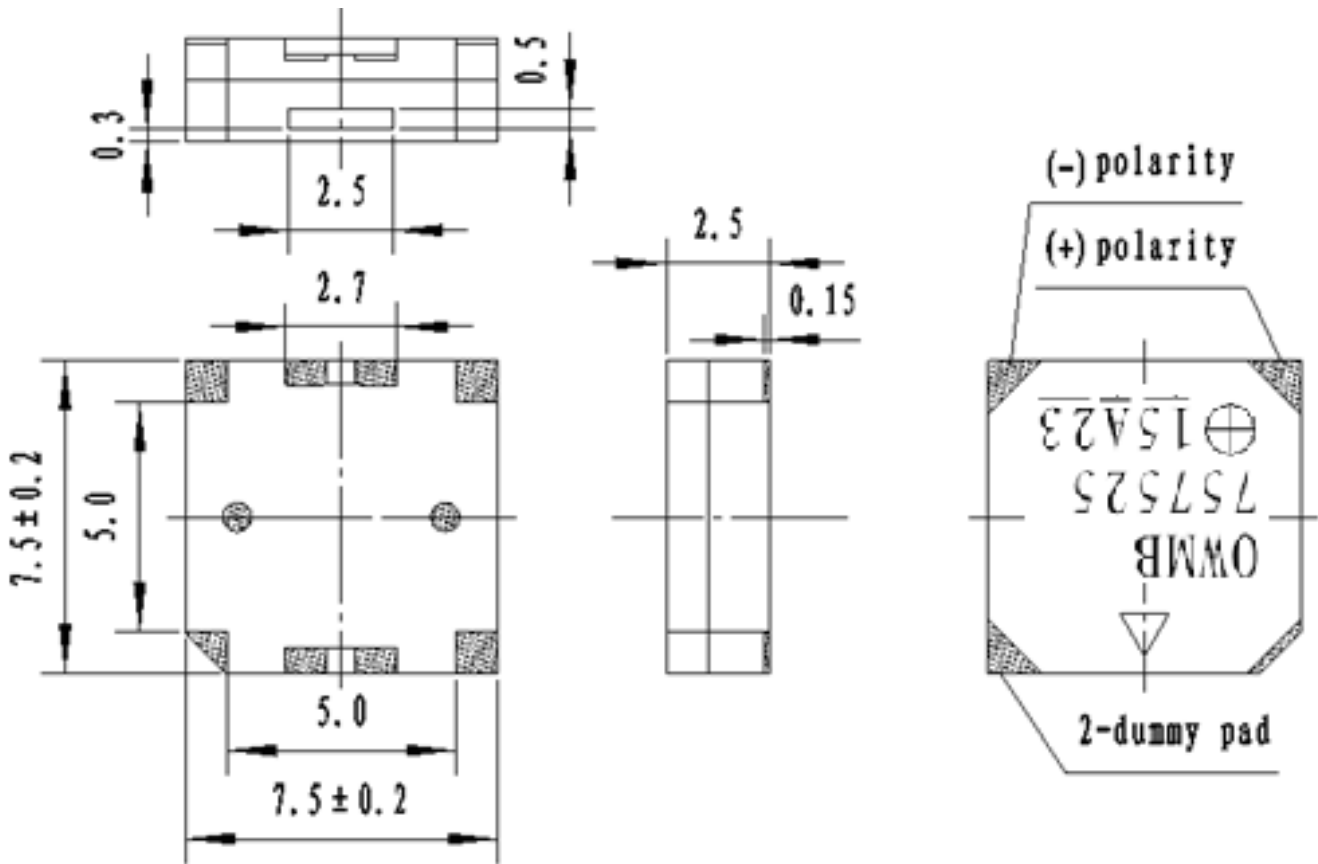
| Profile Feature | Pb-Free Assembly |
|--|------------------|
| Average ramp-up rate(T_L to T_p) | 3°C/second max. |
| Preheat | |
| -Temperature Min.(T_{Smin}) | 150°C |
| -Temperature Min.(T_{Smax}) | 200°C |
| -Temperature Min.(t_s) | 60~180 seconds |
| T_{Smax} to T_L | |
| -Ramp-up Rate | 3°C/second 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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9. DIMENSIONS (Figure 4)

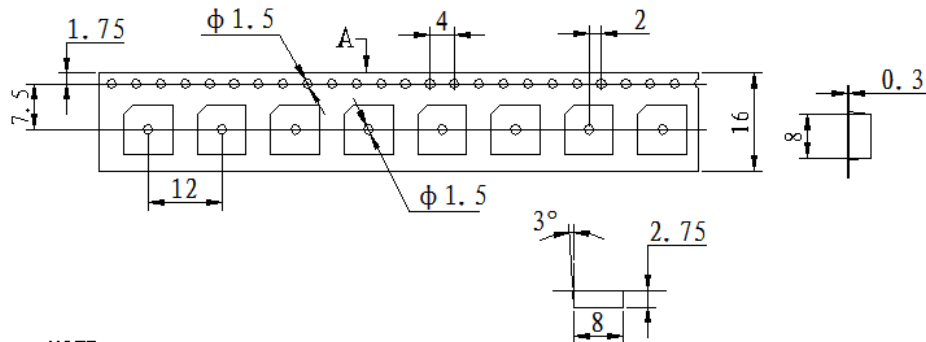
Tolerance: $\pm 0.5\text{mm}$ Except Specified Unit: mm



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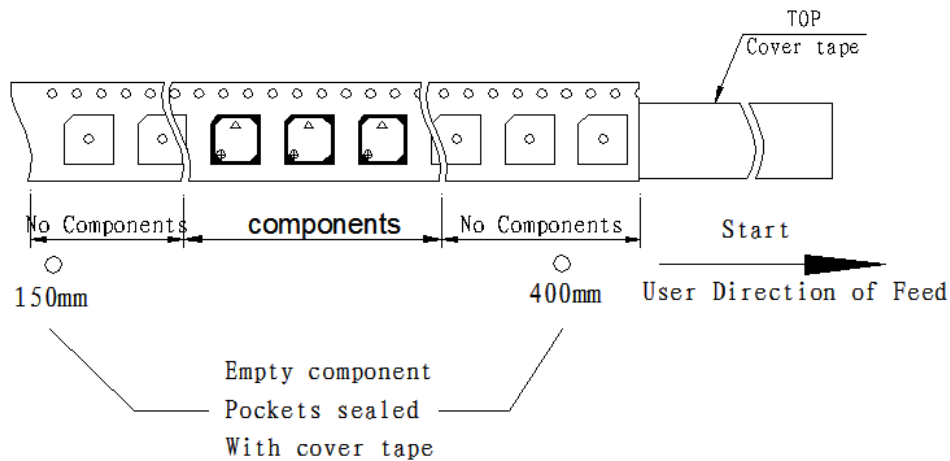
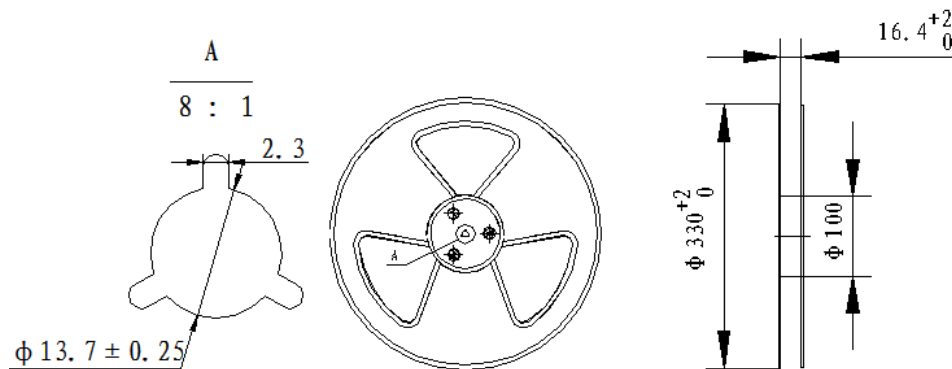
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10. PACKING (Figure 5)



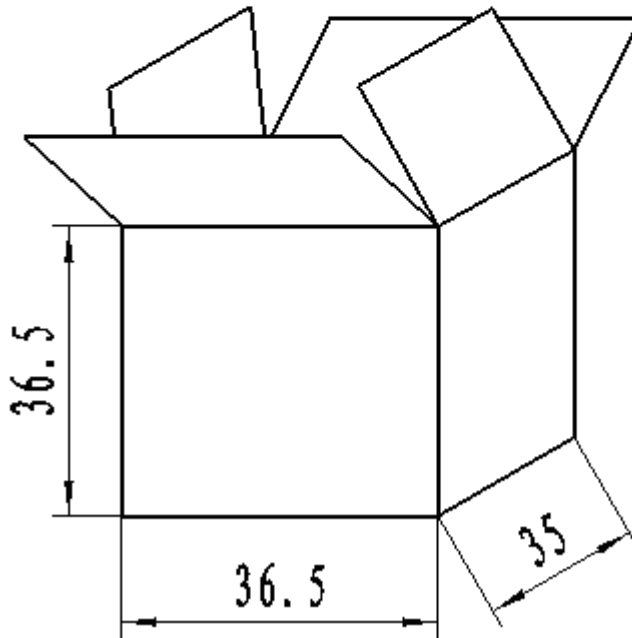
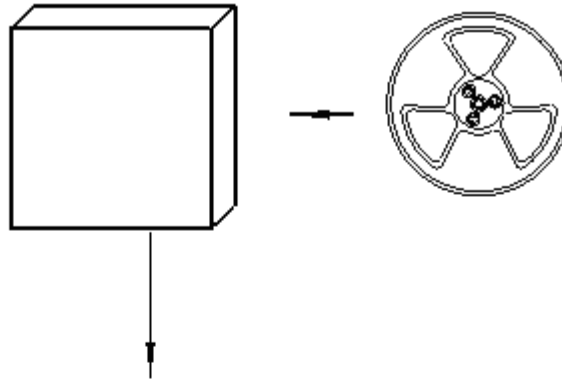
NOTE:

1. 10 sprocket hole pitch cumulative tolerance $\pm 0.20\text{mm}$.
2. All dimensions meet EIA-481-D requirements.
3. Thickness: $0.3 \pm 0.05\text{mm}$.
4. Component loaded per 13" reel: 1000pcs.



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

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