

	Date	10-OCT-2019	<b>SPECIFICATION</b>	OLE WOLFF
	Page	1 / 7		www.owolff.com
	CN	P/N: OWMB-404020SA-40-17		Revision: 00



## SPECIFICATION FOR APPROVAL

### SMD Electro-Magnetic Transducer

Part Number	OWMB-404020SA-40-17
Note	This item was compliance with the following requirements: 1. RoHS directive
Customer P/N	

Ole Wolff	Signature / Date	Prepared	Checked	Approved
		ZhuYu 2019.10.10		

Customer	Signature / Date	Confirmation		

#### REVISION NOTES:

Date	Rev.	Description of Revision
2019.10.10	00	Initial Release

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	Date	10-OCT-2019	<b>SPECIFICATION</b>	OLE WOLFF
	Page	2 / 7		www.owolff.com
	CN	<b>P/N: OWMB-404020SA-40-17</b>		Revision: 00

## 1. SCOPE

THIS SPECIFICATION IS APPLIED TO OLE WOLFF SMD ELECTRO-MAGNETIC TRANSDUCER UNIT OF MODEL: OWMB-404020SA-40-17

## 2. GENERAL REQUIREMENTS

OPERATING TEMPERATURE RANGE: -40°C ~ +85°C

STORAGE TEMPERATURE RANGE: -40°C ~ +85°C

## 3. MECHANICAL LAYOUT & DIMENSIONS

DIMENSIONS: SHOWN IN FIGURE 3.

WEIGHT: 0.1g

## 4. ELECTRICAL CHARACTERISTICS

NO.	ITEM	SPECIFICATION
1	RATED VOLTAGE	3.0V
2	OPERATING VOLTAGE	2-4V
3	RESONANT FREQUENCY	4000Hz
4	☆COIL RESISTANCE	17 ± 3 Ω
5	☆*RATED CURRENT	≤90mA
6	☆* SOUND OUTPUT AT 10cm	≥70dB
7	HOUSING MATERIAL	LCP(Black)

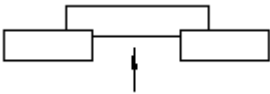
\*Applying rated voltage (Resonant frequency, 1/2 duty, Square wave)

☆Tset Basic State: Temp(20 ± 2°C), Humidity(40~70%RH), Air pressure(860~1060hPa).

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	<b>Date</b>	<b>10-OCT-2019</b>	<b>SPECIFICATION</b>	<b>OLE WOLFF</b>
	<b>Page</b>	<b>3 / 7</b>		<b>www.owolff.com</b>
	<b>CN</b>	<b>P/N: OWMB-404020SA-40-17</b>		<b>Revision: 00</b>

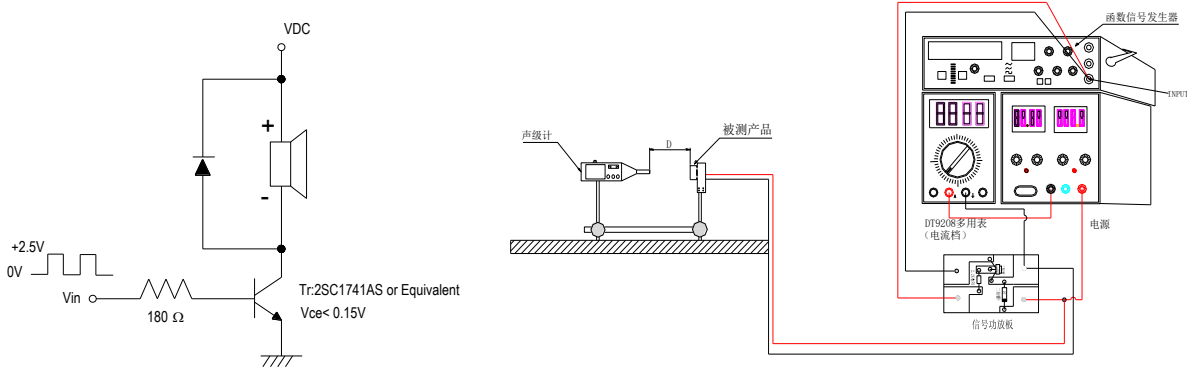
## 5. RELIABILITY TEST

<p>- <b>After Test</b> All specifications must be satisfied after the test.</p>				
<p><b>5.1 High temperature Test</b> Temperature: +85±2°C Duration: 120HRS</p>				
<p><b>5.2 Low temperature Test</b> Temperature: -40±2°C Duration: 120HRS</p>				
<p><b>5.3 Humidity Test</b> Temperature: +40±2°C Humidity: 90~95%RH Duration: 120HRS</p>				
<p><b>5.4 Temperature cycling Test</b> Temperature: -40±2°C      room temp.      +85±2°C      room temp. Duration: 30min      15min      30min      15min Cycle: 5 cycles</p>				
<p><b>5.5 Vibration Test</b> Input power: 10Hz(a period is 1 minute) Amplitude: 1.52mm(9.3g) Duration: 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.</p>				
<p><b>5.6 Shock Test</b> Sounder shall be measured after being applied shock (980m/s<sup>3</sup>) for each three mutually perpendicular directions to each of 3 times by half sine wave.</p>				
<p><b>5.7 Drop Test</b> Dropped naturally from 700mm height onto the surface of 10mm thick wooden board. 2 directions-upper and side of the part are to be applied.</p>				
<p><b>5.8 Lead pull</b> The part shall be pulled with a force of 9.8N for 10±1 seconds behind the part.</p> <div style="text-align: center;">  </div> <p>After the test part shall meet specifications without any degradation in appearance and performance.</p>				
<p><b>5.9 Recommended temp. Profile for Reflow Oven</b> Shown in Figure 4</p>				

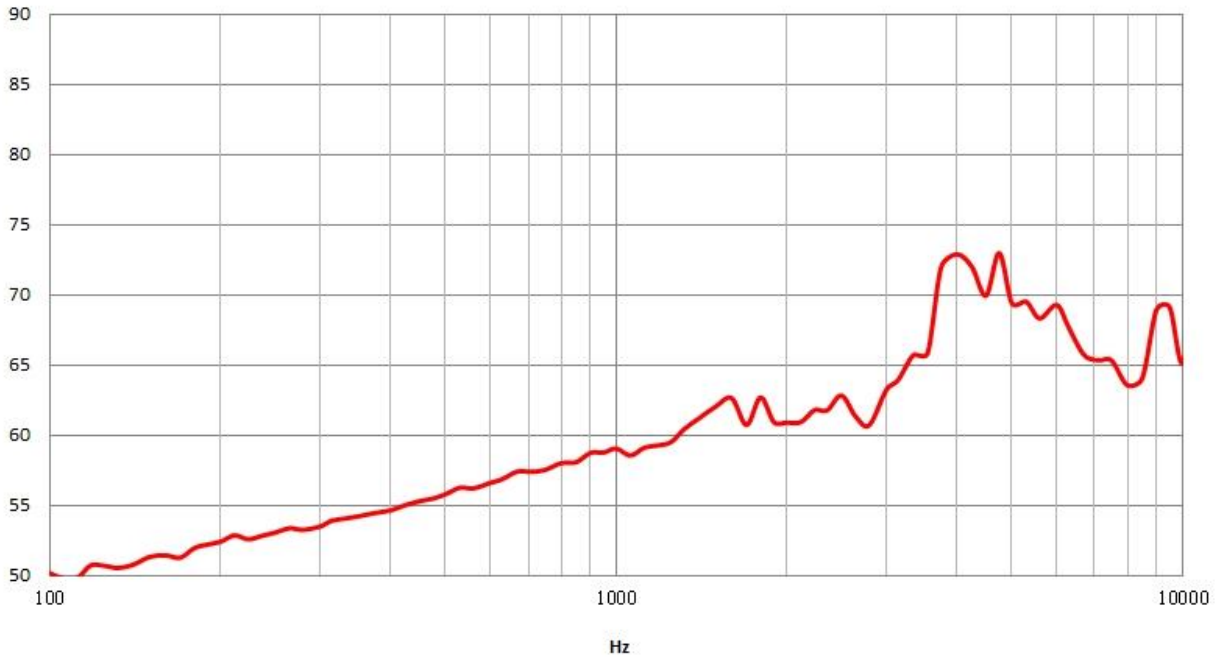
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	<b>Date</b>	<b>10-OCT-2019</b>	<b>SPECIFICATION</b>	<b>OLE WOLFF</b>
	<b>Page</b>	<b>4 / 7</b>		<b>www.owolff.com</b>
	<b>CN</b>	<b>P/N: OWMB-404020SA-40-17</b>		<b>Revision: 00</b>

## 6. TEST METHOD (Figure 1)



## 7. FREQUENCY RESPONSE (Figure 2)

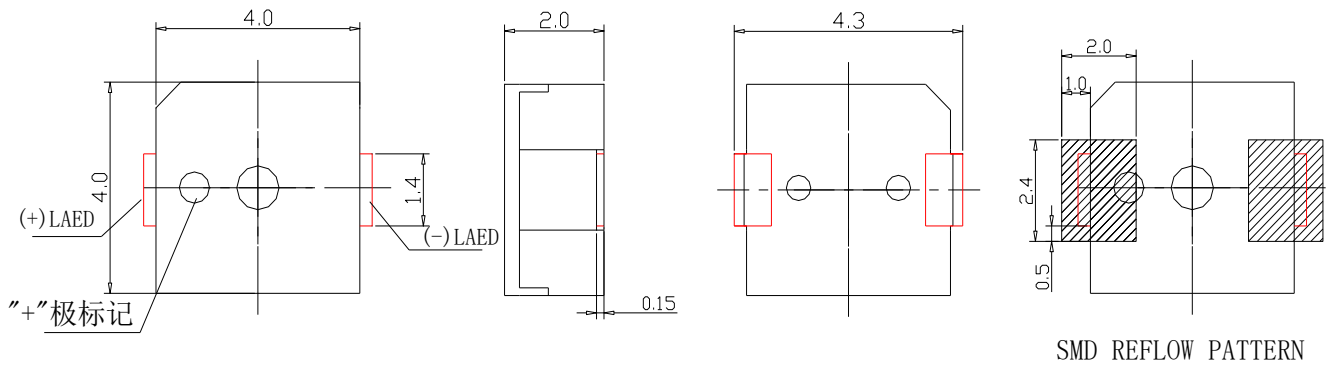


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	<b>Date</b>	<b>10-OCT-2019</b>	<b>SPECIFICATION</b>	<b>OLE WOLFF</b>
	<b>Page</b>	<b>5 / 7</b>		<b>www.owolff.com</b>
	<b>CN</b>	<b>P/N: OWMB-404020SA-40-17</b>		<b>Revision: 00</b>

### 8. DIMENSIONS (Figure 3)

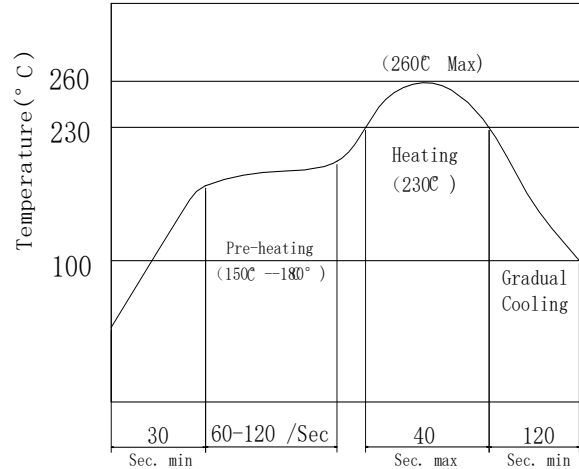
Unit: mm Tolerance:  $\pm 0.5$ mm Except Specified



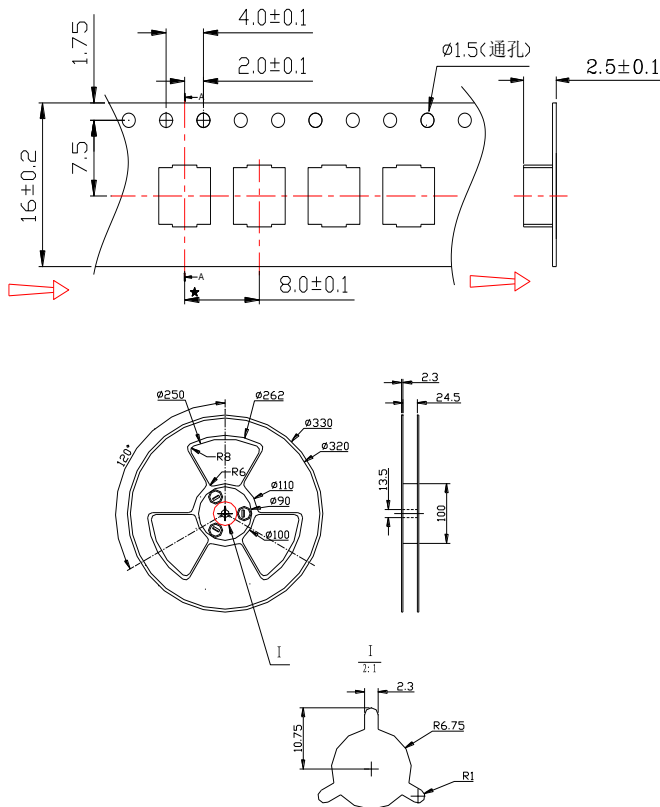
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	<b>Date</b>	<b>10-OCT-2019</b>	<b>SPECIFICATION</b>	<b>OLE WOLFF</b>
	<b>Page</b>	<b>6 / 7</b>		<b>www.owolff.com</b>
	<b>CN</b>	<b>P/N: OWMB-404020SA-40-17</b>		<b>Revision: 00</b>

**9. Recommended Temp. Profile for Reflow Oven (Figure 4)**



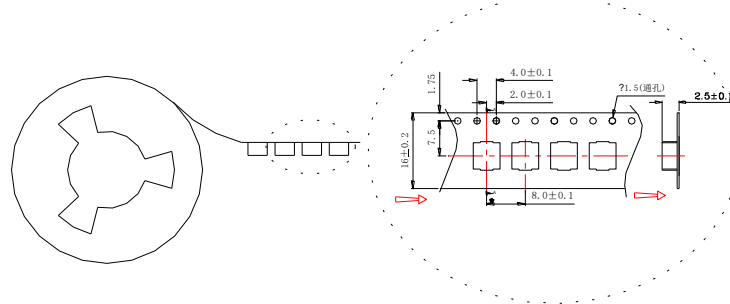
**10. PACKAGE INFORMATION (Figure 5)**



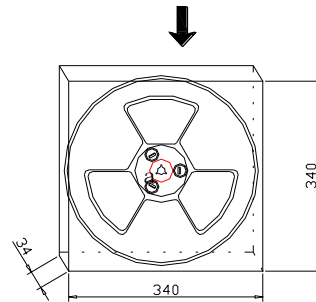
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	Date	10-OCT-2019	<b>SPECIFICATION</b>	OLE WOLFF
	Page	7 / 7		www.owolff.com
	CN	<b>P/N: OWMB-404020SA-40-17</b>		Revision: 00

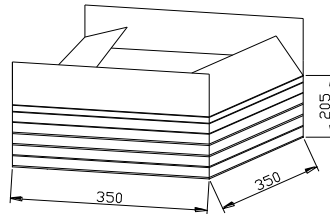
### 11. PACKAGE INFORMATION (Figure 6)



3000PCS/CARRUER REEK; 每卷装3000只



1ROLL CARRIER REEL/INNER BOX; 1卷放入一内盒



15000PCS/CTN 每箱放15000只(5只内盒)

#### NOTES:

- 1.3000 PCS per box
- 2.Total 5 boxes per carton
- 3.Total 15000 PCS carton

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