

**SMD-Signalgeber (ohne Ansteuerung) SMD-P16 Art.-Nr.: 220050**

**Specification :**

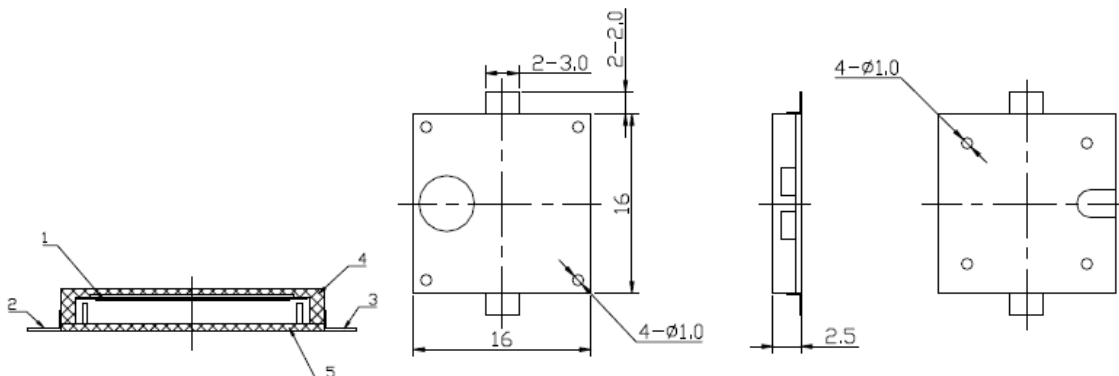
TYPE	UNIT	SMD-P16
◆ Min. Sound Output at 10cm	dB	70
Rated Voltage	Vp-p	3
Operating Voltage	Vp-p	1~25
Resonant Frequency	Hz	4000
◆ Max. Rated Current	mA	3
Capacitance at 1kHz	pF	14000±30%
Operating Temperature	°C	-30~+70
Storage Temperature	°C	-40~+85
Material		LCP
Weight	g	1.2

◆ Value applying at (rated voltage,4000Hz,1/2 duty square wave)

**Dimensions :**

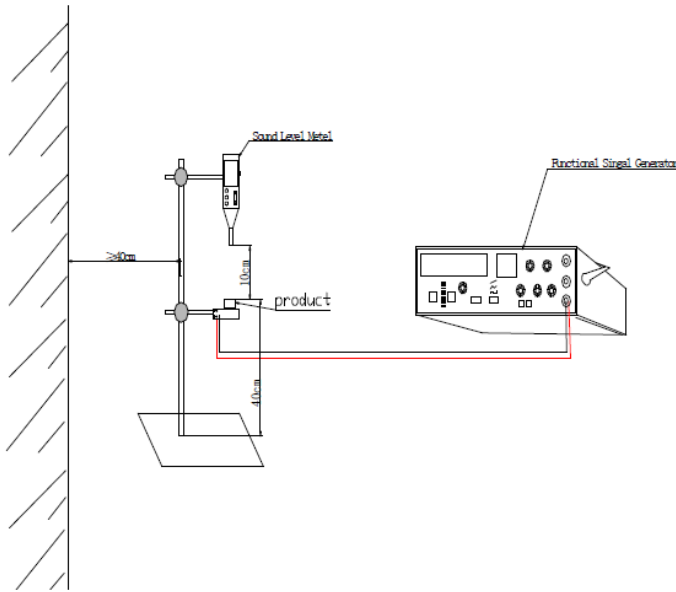
(Unit: mm)

Unless otherwise specified, tolerance: ±0.5(unit: mm)

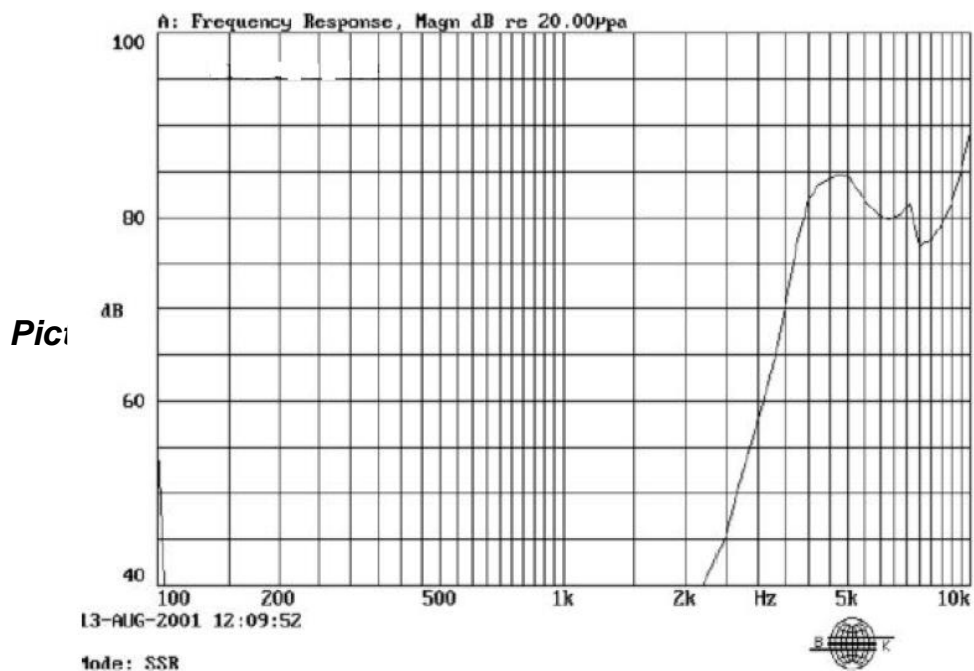


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**Testing Method :**

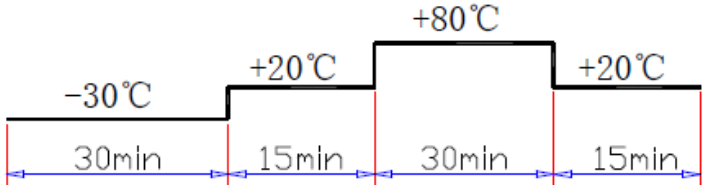
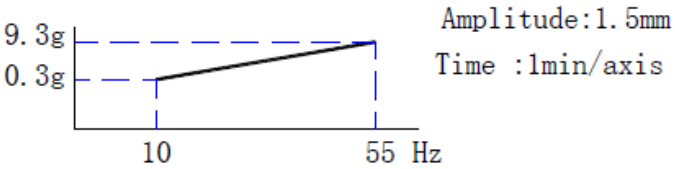


**Typical Frequency Response Curve :**



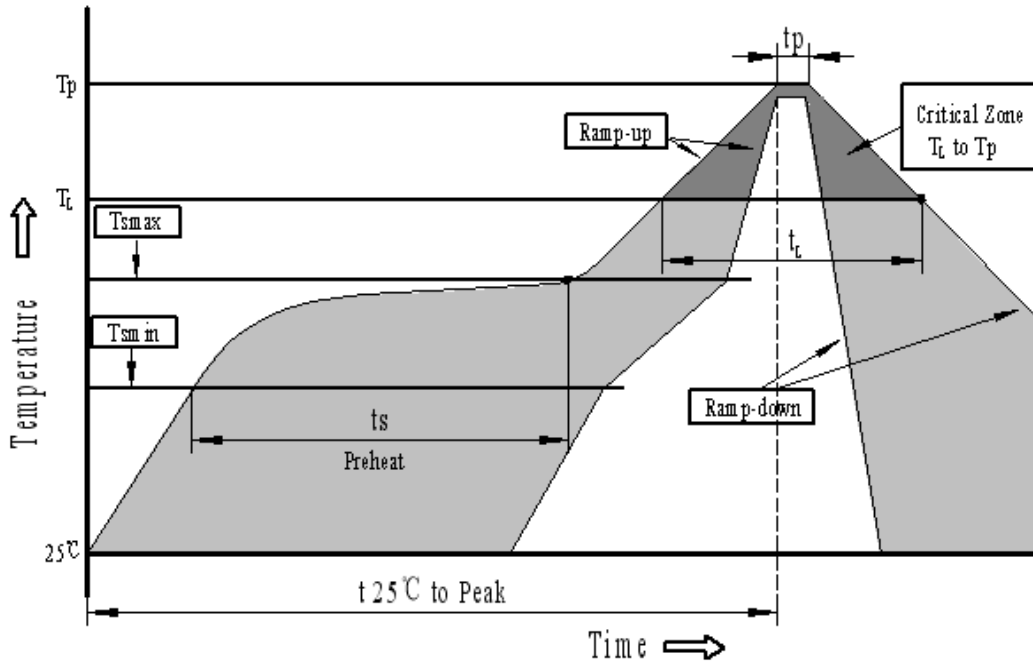
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**Reliability Test :**

Item	Specifications
2-1 Storage in High temp.	Storage in $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-2 Storage in Low temp.	Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-3 Storage in Humidity	Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-4 Thermal cycle test.	 <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
2-5 Vibration test	 <p>Amplitude: 1.5mm Time : 1min/axis</p> <p>Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).</p>
2-6 Drop test	Free drop a unit from the height 100cm to the surface of 10mm thick board ,three directions(X,Y,Z).
2-7 Solderability test	Soldering temp.: $260 \pm 5^{\circ}\text{C}$ Heat applying time: $3 \pm 0.5\text{sec.}$
<p><b>PASS CRITERION :</b></p> <p>After these tests , the change of S.P.L shall be within <math>\pm</math> dB .</p>	

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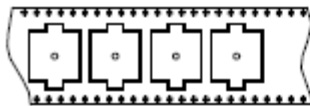
**Recommended Temp.Profile for Reflow Oven (Fig.1):**



Profile Feature	Pb-Free Assembly
Average ramp-up rate( $T_L$ to $T_p$ )	3°C/second max.
Preheat	
-Temperature Min.( $T_{s\ min}$ )	150°C
-Temperature Min.( $T_{s\ max}$ )	200°C
-Temperature Min.( $t_s$ )	60~180 seconds
$T_{s\ max}$ 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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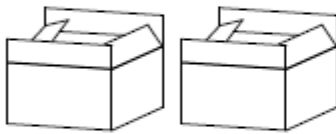
**Packing :**



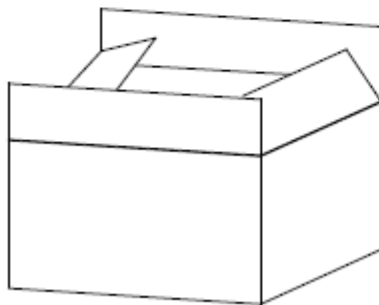
800PCS/TAPE



800PCS/SPOOL



5SPOOL/BOX  
4000PCS/BOX  
box size:340x340x300mm;



box size:358x358x615mm;  
4000x2=8000pcs/box

