

Specification for Magnetic Transducer		Page	3/12
Model No. : SMT-G9035K-K10340		Revision No.	1.0
		Drawing No.	OEM10340R

1. Scope

This product specification is applied to the Magnetic Transducer in alarm systems. Please contact us when using this product for any other applications than described in the above.

本规格书适用于电磁式声响器，通常它用在系统中做报警或提示的声响器用，如果将该产品用于其它领域，请与我们联系。

2. General

2.1 Out-Diameter : Ø9 mm

外径: : Ø9 mm

2.2 Height : 3.5mm

高度: : 3.5 mm

2.3 Weight : 0.45 g

重量: : 0.45克

2.4 Operating Temperature range:

-40~+85°C without loss of function

工作温度: -40~+85°C

Store Temperature range:

-40~+85°C without loss of function

储藏温度: -40~+85°C

3. Electrical and Acoustic Characteristics.

Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

测试条件: 15~35 °C, 25%~85%RH, 860~1060mbar

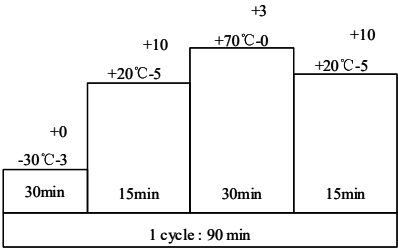
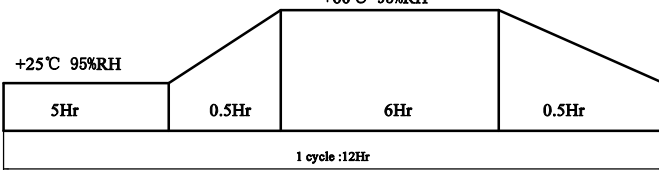
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	3.6V
2	Operating Voltage 工作电压	2~5V
3	Max.Rated Current 额定电流	90mA/3.6V
4	Resonant Frequency 谐振频率	At 845Hz and 962 Hz ; 2731Hz
5	Min.Sound Pressure Level 额定声压	At 845 Hz and 962Hz:80dB/3.6v/10cm
		At 2731Hz :87dB/3.6v/10cm
6	Coil Resistance 直流阻抗	16±3 Ω
7	Case Material/Color 壳体材质/颜色	LCP 6130/Black

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4. Reliability Test

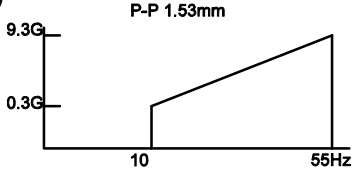
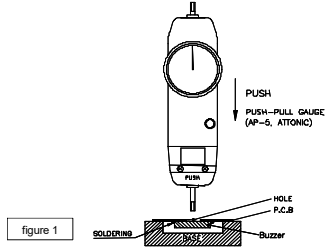
After test(1~6item), the transducer S.P.L . difference shall be within $\pm 5\text{dB}$, and the appearance not exist any change to be harmful to normal operation(e.g.cracks,rusts,damages and especially distortion).

在1-6项试验后，声响器的声压变化值在 $\pm 10\text{dB}$ 之内，外观无变化（例如：开裂、生锈、损伤、变形等现象）。

	Item	Specification
1	High Temperature Test 高温试验	Storage in $85 \pm 3^\circ\text{C}$ test box for 96 hours then expose to the room temperature for 2 hours. 将产品置于 $+85 \pm 3^\circ\text{C}$ 试验箱中，放置 240小时，然后在正常大气压条件下恢复2小时后，进行测量
2	Low Temperature Test 低温试验	Storage in -40°C test box for 96 hours then expose to the room temperature for 2 hours. 将产品置于 $-40 \pm 3^\circ\text{C}$ 试验箱中，先放置 240小时，然后在正常大气压条件下恢复2小时后，进行测量
3	Life test in the room temp. 常温寿命	Operate sound transducer continuously for 1000 hours with applying 3.6V, square wave, 1/2 duty, 2731Hz, using the test circuit as per attached drawing. 常温3.6v,2731HZ工作1000个小时,然后在正常大气压条件下恢复2小时后，进行测量
4	Temperature Cycle 温度循环	Make this test for 5 cycle without applying power, then expose to the room temperature for 2 hours. 将产品置于试验箱中，经过5个循环后，在正常大气压条件下恢复2小时，进行测量 
5	Temp. / Humidity Resistance 温湿度试验	Make this test for 10 cycles without applying power, then expose to the room temperature for 2 hours. $+60^\circ\text{C}$ 95%RH  产品不通电,如图10个循环后,室温放置2小时后,检验产品

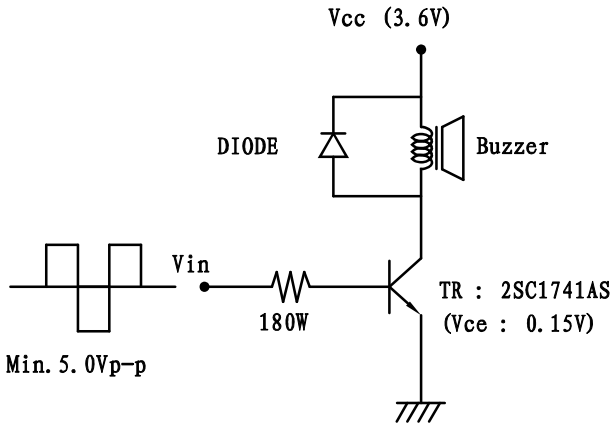
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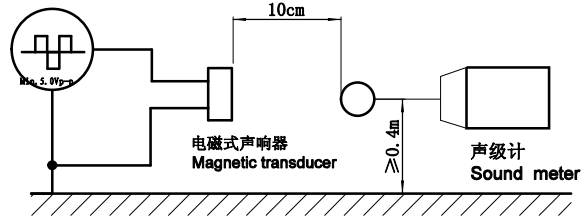
	Item	Specification
6	Vibration test 振动试验	<p>Make this test for the directions of X, Y and Z.for 2 hours each (total 6 hours).To-and-fro sweep time is 1 minute Dimension of PCB : 60×90 ×1.6t (mm)</p> <p>样品固定在印制板 (60×90 ×1.6t mm) , XYZ轴各振2小时,总计6小时</p> 
7	Drop test 自由跌落	<p>Fix sound transducer on the P.C.B with polyester film(t=0.2mm, gross weight:100g) and the height of 120cm to the direction of six surface for 3 cycles.</p> <p>样品固定的PCB上, 6个方向120cm跌落,各跌3次,检验产品</p>
8	Solderability 可焊性	<p>The part shall be dipped into the soldering bath conditioned as follows;- Solder temp. : 235±5°C- Soaking time :2±0.5sec.</p> <p>产品引脚浸入到260±5°C的锡炉中2±0.5秒后, 检验引脚包锡</p>
9	Pad test 可焊性	<p>Test Standard (JIS C0050)</p> <ul style="list-style-type: none"> -Don't be the pad omission & the quake.To satisfy the electronic performance. Pad Tensile Strength Test Condition - In the pad direction, push the buzzer for 10 sec.with tensile strength of 1.0kg - Refer to the following figure 1 <p>标准出处:JIS C0050 样品焊在PCB上,焊接方向,1KG推力10S,之后检查产品.示意图在如图1</p> 
10	Judgment at reliabiliyt 判定标准	<p>1)No significant change both in appearance and structure 2)Change in sound output should be within±10dB. 3)No abnormality in operation and tone quality is allowed.</p> <p>1)外观无明显变化 2)声压变化在初始值的±5dB以内 3)音质无异常</p>

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5. Measurement Block Diagram & Frequency Response



5.1 Test driver circuit

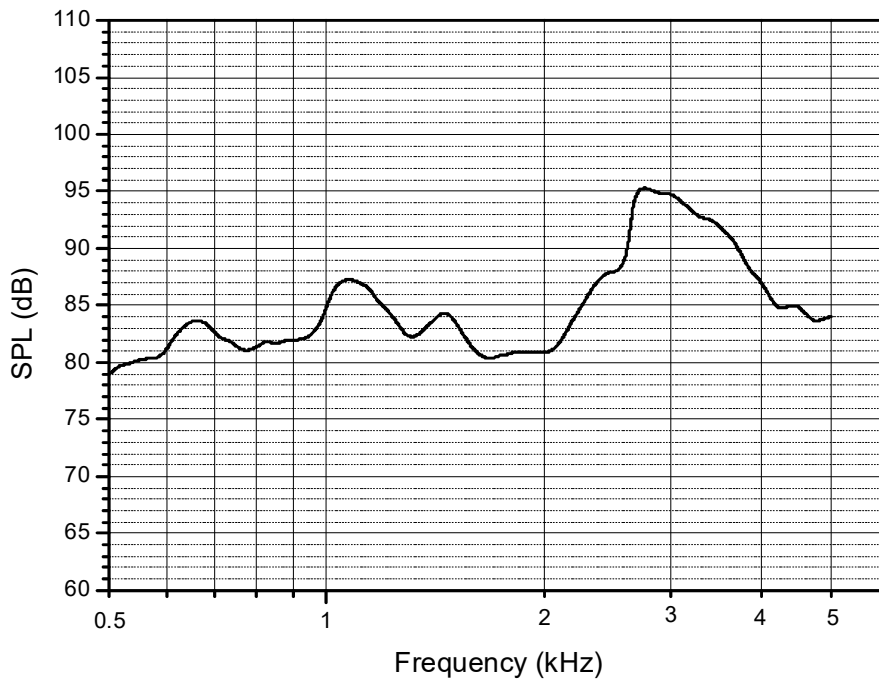


MIC : ND10 普通声级计或等同品
 MIC : ND10 S.P.L. or equivalent

S.G. : DF1010 振荡器或等同品
 S.G. : DF1010 Oscillater or equivalent

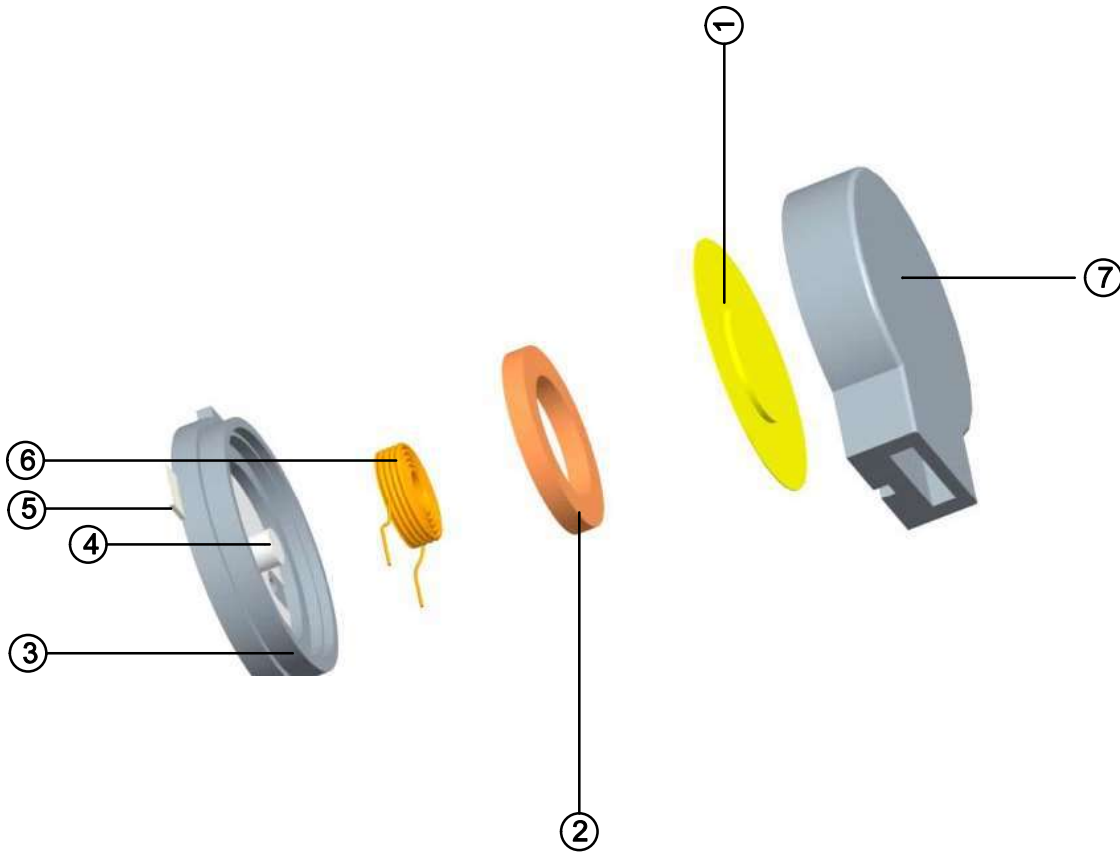
5.2 Standard Test Fixture

5.3 Frequency Response



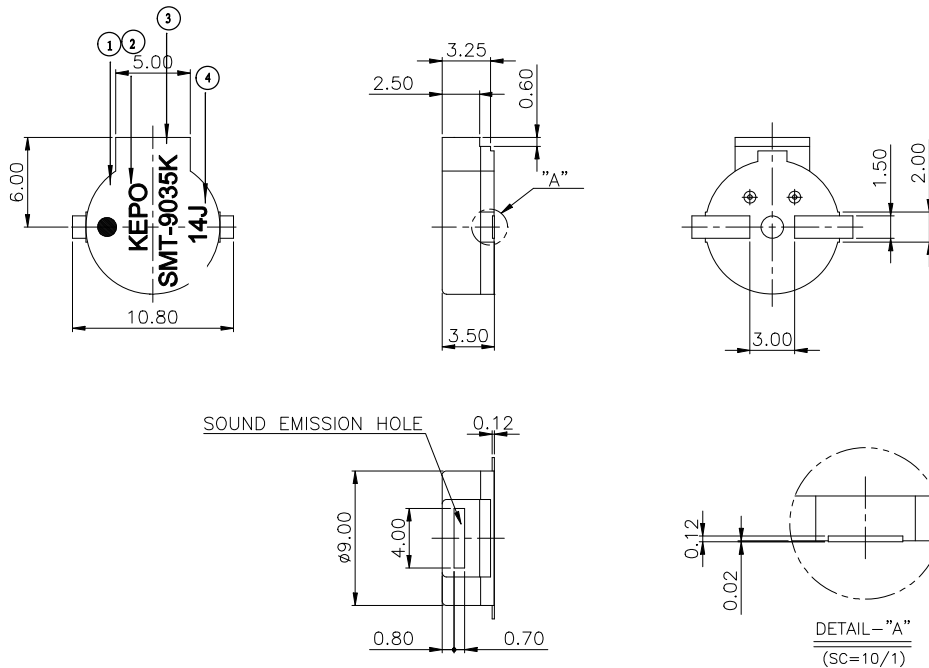
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6. Structure



7	Upper Case 上壳体	1	LCP 6130	
6	Coil 线圈	1	CU	
5	Terminal 引脚	1	PBS	
4	T Core T铁	1	Fe	
3	Lower Case 下壳体	1	LCP 6130	
2	Magnetic ring 磁环	1	—	
1	Diaphragm 膜片	1	—	
No.	Part Name 型号	数量 Q'TY	Material 材质	SGS 认证号

7. Dimensions



① Polarity Mark

② Mark Name

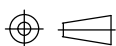
③ Model No.

④ Data code

The first digit is the number of the year. The last digit is the month.

A- January through L - December

THIRD ANGLE PROJECTION



UNIT : mm

Tolerance : ±0.2

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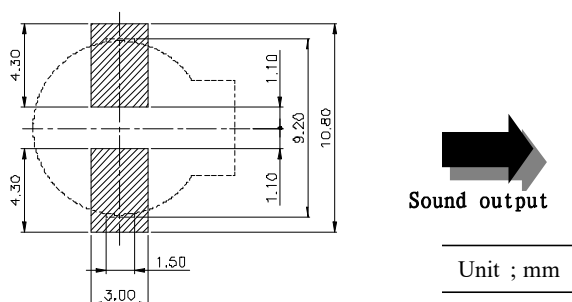
9. 警告 Cautions

Please contact us before using our products for the undermentioned applications requiring especially high reliability in order to prevent defects which might directly cause damage to other party's life, body or property (listed below).

- (1) Aircraft equipment 飞行设备
- (2) Aerospace equipment 航天设备
- (3) Undersea equipment 潜水设备
- (4) Medical equipment 医疗设备
- (5) Transportation equipment (automobiles, trains, ships) 交通设施
- (6) Traffic signal equipment 交通信号设备
- (7) Disaster prevention/crime prevention equipment 防灾害/防犯罪设备
- (8) Data-processing equipment 数据处理设备
- (9) Applications of similar complexity or reliability requirements comparable to the applications listed in the above 以及与上述相类似或可靠性要求更高的设备

10. 注意事项 Cautions for Use

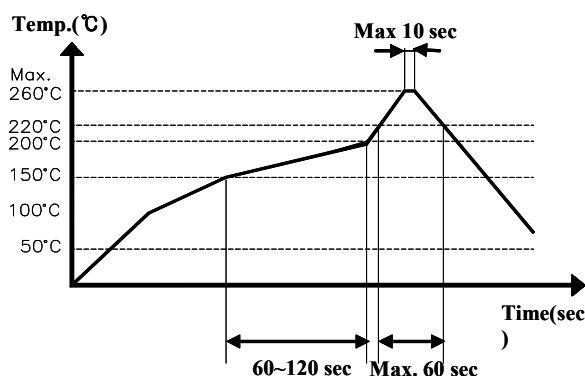
10.1. Recommend Pattern Land PCB板布局



10.2 Soldering Condition

焊接条件

■ Reflow Soldering 回流焊



■ Manual Soldering 手工焊

In case of using solder iron for soldering, the top of soldering iron's temperature should be kept less than +350°C. Moreover the soldering time should be also kept with in 3seconds.

在使用烙铁的情况下,应注意烙铁头的温度应该保持在+350°C以下,并且焊接时间控制在3秒内。