

# SPECIFICATION

Customer :

Applied To :

Product Name : Magnetic Transducer

Model Name : SMT-7520A

Drawing No. : KP3.840.918

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date



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Specification for Magnetic Transducer	Page	2/10
	Revision No.	1.1
	Drawing No.	KP3.840.918
Model No. :	SMT-7520A	

## CONTENTS

1. Scope  
范围
2. General  
概要
3. Electrical and Acoustic Characteristics.  
电声参数
4. Reliability Test  
可靠性试验
5. Measurement Block Diagram & Response curve  
测试图和曲线图
6. Structure  
结构
7. Dimensions  
尺寸
8. Packing  
包装
9. Revision  
履历表

Specification for Magnetic Transducer		Page	3/10
		Revision No.	1.1
Model No. :	SMT-7520A	Drawing No.	KP3.840.918

## 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 : 7.5×7.5mm

外径: 7.5×7.5mm

2.2 Height : 2.0 mm

高度: 2.0 mm

2.3 Weight : 0.27g

重量: 0.27g

2.4 Operating Temperature range:

-30~+70°C without loss of function

工作温度: -30~+70°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

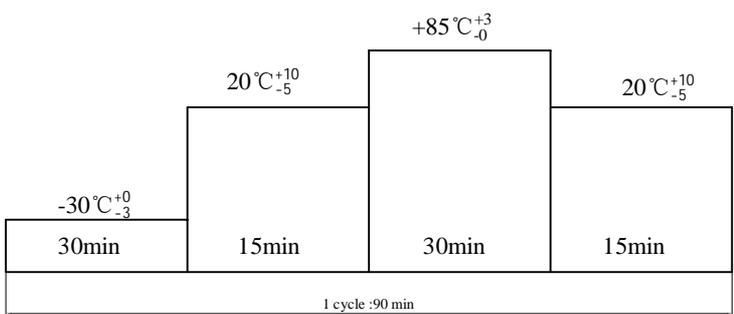
	Items 项目	Specification 规格
1	Rated Voltage 额定电压	3.6V
2	Operating Voltage 工作电压	2.5~4.5V
3	Max. Rated Current 额定电流	120mA
4	Resonant Frequency 谐振频率	2700Hz
5	Min. Sound Pressure Level 额定声压	85dB/3.6V/10cm
6	Coil Resistance 直流阻抗	12±2 Ω
7	Coil Impedance 交流阻抗	30 Ω
7	Case Material/Color 壳体材质/颜色	PBS/Black

Specification for Magnetic Transducer		Page	4/10
		Revision No.	1.1
Model No. :	SMT-7520A	Drawing No.	KP3.840.918

## 4. Reliability Test

After test(1~7item), the transducer S.P.L . difference shall be within  $\pm 10\text{dB}$ , and the appearance not exist any change to be harmful to normal operation(e.g.cracks,rusts,damages and especially distortion).

在1-7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	Heat Resisance 高温试验	Storage in $85^{\circ}\text{C}$ test box for 96 hours then expose to the room temperature for 2 hours 将产品置于 $85^{\circ}\text{C}$ 试验箱中96小时，然后在常温下放置2小时后检测产品
2	Cold Resistance 低温试验	Storage in $-40$ test box for 96 hours then expose to the room temperature for 2 hours.. 将产品置于 $-40^{\circ}\text{C}$ 试验箱中96小时，然后在常温下放置2小时后检测产品
3	Life test in the room temp 寿命试验	Operate sound transducer continuously for 1000 hours with applying 3.6V,square wave, $\frac{1}{2}$ duty,2670HZ,using the test circuit as perattached drawing. 产品在额定的条件下连续工作1000小时后检测产品
4	Temperature Cycle 温度循环试验	Make this test for 5 cycle without applying power ,then expose to the room temperature for 2 hous. 产品在不通电的条件下按以下要求循环5次然后在常温下放置2小时后检测产品 

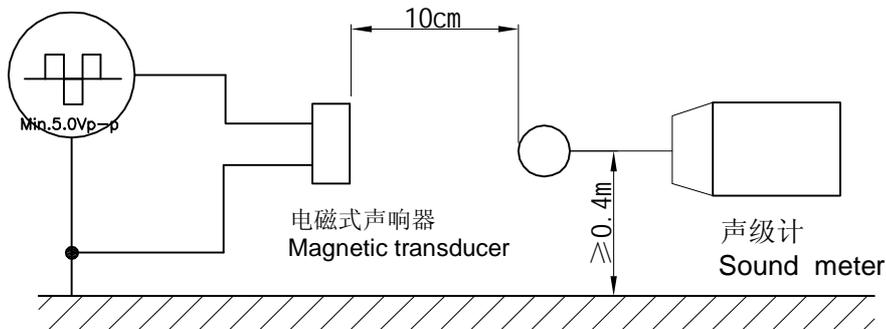
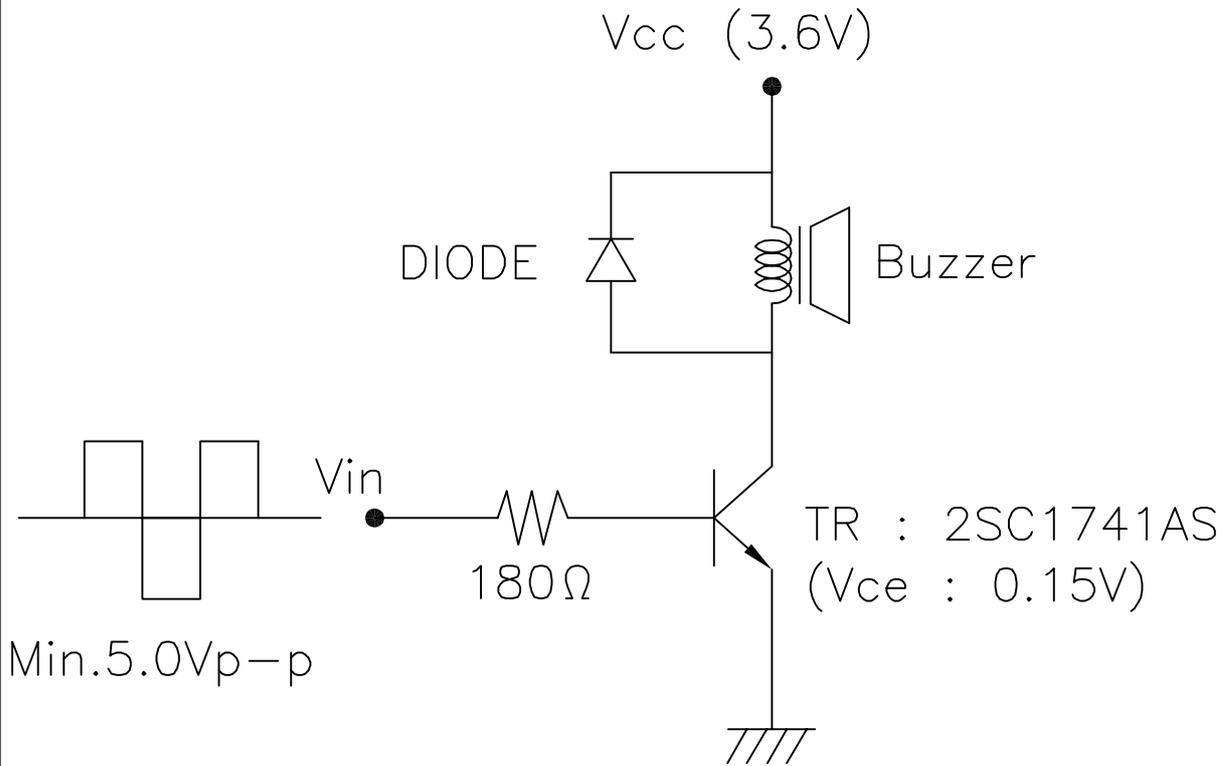
Specification for Magnetic Transducer		Page	5/10
		Revision No.	1.1
Model No. :	SMT-7520A	Drawing No.	KP3.840.918

#### 4. Reliability Test

	Item	Specification
5	Temp./Humidity Resistance 湿热试验	<p>Maki this test for 10 cycles without applying power, then expose to the room temperature for 2 hours. 产品在通电的情况下按要求循环10次，然后在常温下放置2小时后检测产品</p> <p style="text-align: center;">1 cycle : 12Hr</p>
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: 60X90X1.6t(mm) 产品在X、Y、Z三个方向按要求各振动2小时后检测产品</p> <p style="text-align: center;">P-P 1.53mm</p>
7	Drop test 跌落试验	<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. 将产品固定在印制板上，在高度为120 CM、6个不同表面各跌落1次，共循环3次后检测产品</p>
8	Solderability 可焊性试验	<p>The part shall be dipped into the soldering bath conditioned as follows; -Solder temp: 260±5 °C -Soaking time: 2±0.5sec 将产品浸入260±5°C的锡炉中2±0.5秒后检测产品</p>
9	Reflow Soldering 回流焊接	<p style="text-align: center;">Temp.(°C)</p> <p style="text-align: center;">Max 10 sec</p> <p style="text-align: center;">Time(sec)</p> <p style="text-align: center;">60~120 sec    Max. 60 sec</p>

Specification for Magnetic Transducer		Page	6/10
Model No. : SMT-7520A		Revision No.	1.1
		Drawing No.	KP3.840.918

### 5. Measurement Block Diagram



MIC : ND10 普通声级计或等同品

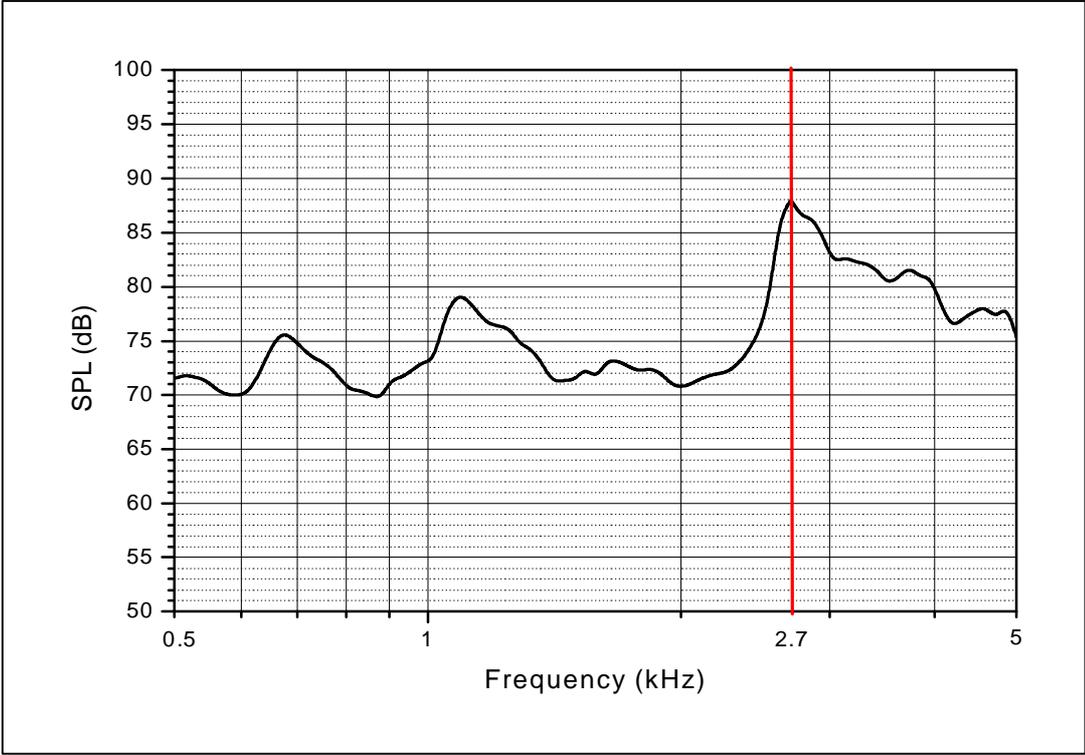
MIC : ND10 S.P.L. or equivalent

S.G. : DF1010 振荡器或等同品

S.G. : DF1010 Oscillater or equivalent

Specification for Magnetic Transducer		Page	7/10
		Revision No.	1.1
Model No. : SMT-7520A		Drawing No.	KP3.840.918

## 5.2 Frequency Response

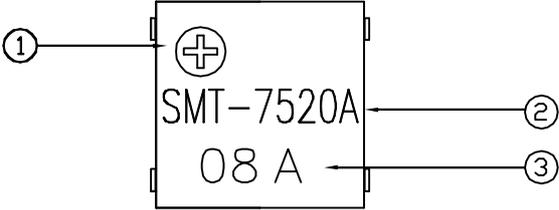
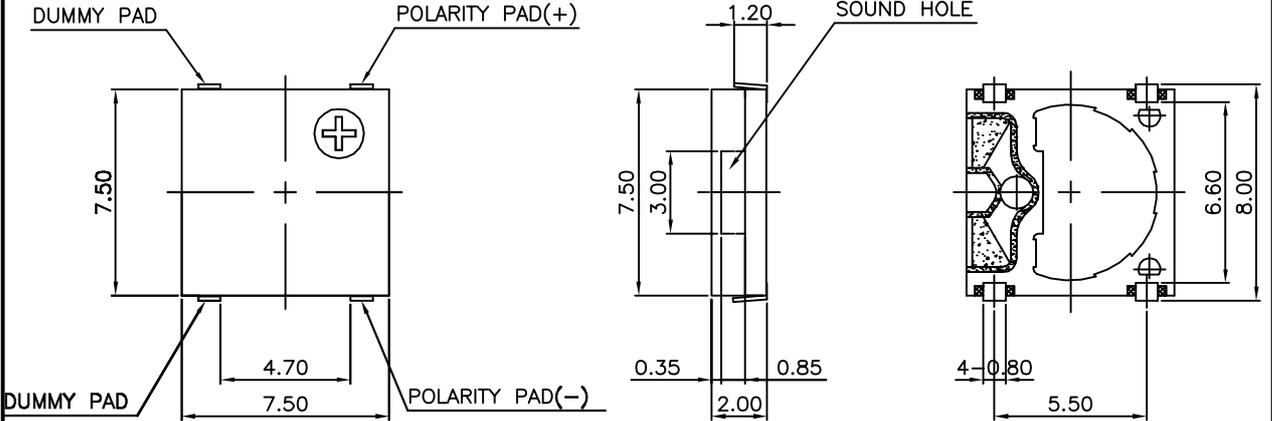


## 6. Structure

No	Part Name	Unit	Material
1	UPPER CASE	EA	LCP 6130
2	LOWER CASE	EA	LCP 6130
3	YOKE	EA	Pure-Fe
4	COIL	EA	3DS-FC
5	MAGNET	EA	Sm-Co
6	RESONATOR	EA	PERMALLOY
7	MAGNET PLATE	EA	PERMALLOY
8	TERMINAL	EA	PBS
9	SOLDER	EA	Sn95%Ag5%

Specification for Magnetic Transducer	Page	8/10
	Revision No.	1.1
Model No. : SMT-7520A	Drawing No.	KP3.840.918

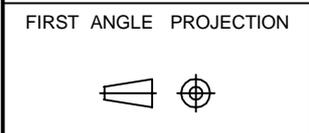
### 7. Dimensions



- ① Polarity Mark (+)
- ② Model No.
- ③ Date code

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

A- January through J - October

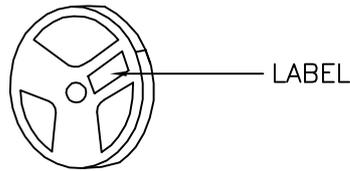


UNIT : mm  
Tolerance : ±0.2

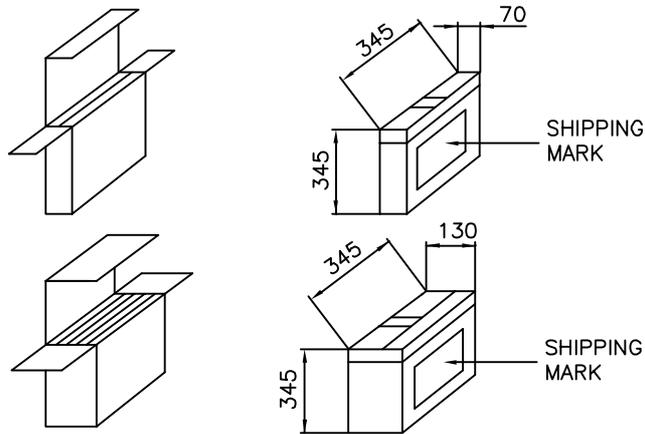
Specification for Magnetic Transducer	Page	9/10
	Revision No.	1.1
Model No. : SMT-7520A	Drawing No.	KP3.840.918

## 8. Packing

8-1. 1000 pcs per 1 roll by using the tapping M/C.



8-2. 2 rolls or 5 rolls per 1 double(thick) carton box packed by polypropylene tape.



8-3. Content of the label

- Model No.
- Lot No.
- Buyer Parts No.
- Quantity
- Date
- Vendor

8-4. The label to stick

P/O No.	
Model No.	
Lot No.	
Part No.	
Quantity	pcs
Date	200 . . .
Vendor	.

