

SPECIFICATION

For Electro-Magnet Transducer

Customer	
Customer P/N	
Bestar Model Name	SMT1212-05XH10LF
Product No.	050900
Issue No.	BS/TET01.047B
Issue Date	07/11/16

Approval:

- 1.Characteristics
- 2.Dimension
- 3.Environmental Test
- 4.Surface Mounting Condition
- 5.Packing
- 6.Notice
- 7.History change record

Drawn by	Checked by	Approved by	Customer approved
魏奉玲	陶红仲	张秀琴	

For conform to the European Union Directive on the Restriction of Hazardous Substances(RoHS), this type of productions forbid use all the hazardous substances as follow:

Lead
Cadmium
Mercury
Hexavalent chromium
Polybrominated biphenyls (PBB)
Polybrominated diphenyl ethers (PBDE)



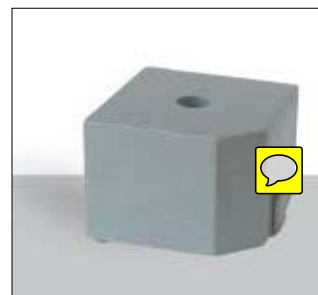
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SMT1212-05XH10 LF

1. Characteristics

1.1 Features

1. SMD;thinner , smaller size
2. High S.P.L.; and clear sound
3. Reflowable;RoHS complant
4. Tape & Reel or magazing supply
5. Minimum quantity (one reel): 280 pcs.



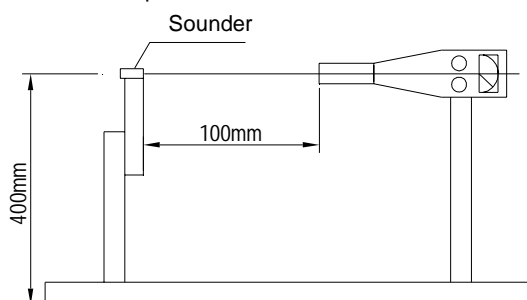
1.2 Electrical and Mechanical Characteristics

No	Type	Specifications
1	Rated Voltage (V)	5
2	Operating Voltage (V)	4-7
3	a)Rated Current (mA)	max.30
4	a)Sound Output at 10cm(dB)	min.85
5	a)Resonant Frequency(Hz)	2300± 300
6	Operating Temperature(° C)	-20~+70
7	Storage Temperature(° C)	-30~+80
8	Weight (g)	2
	a)Value applying rated voltage(DC)	
	Sound Output after reliability test more than 80 dB	

1.3 Test method:

Standard test Fixture

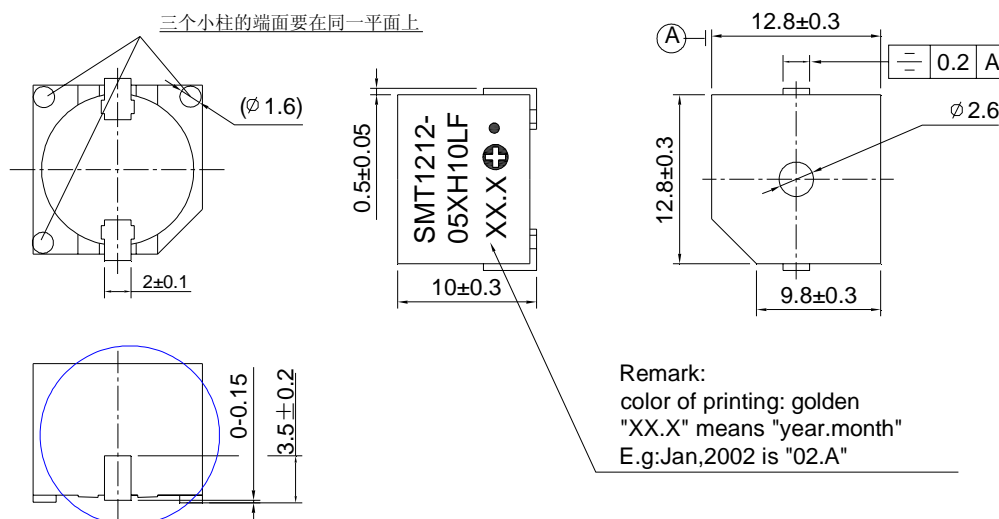
No reaction in space with in 400mm in all direction



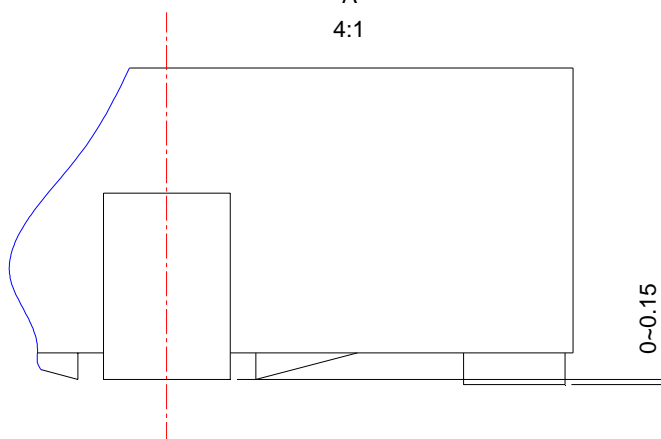
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B	07/11/16	魏奉玲		Drawn by:	魏奉玲	
A	01/07/04	王善梅		Checked by:	陶红仲	Transducer
REV.	Date	Drawn	Note	Approved by:	张秀琴	
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2.Dimension:



A
4:1



Tolerance: $\pm 0.3\text{mm}$

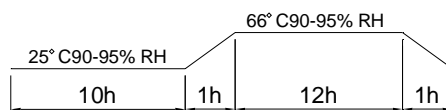
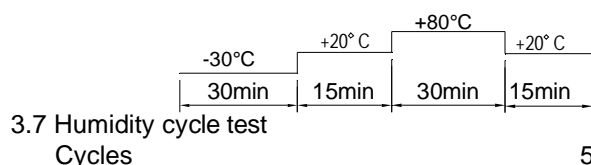
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3.Environmental Test

- 3.1 High temperature storage test
 Temperature +80 °C
 Duration 96hrs
- 3.2 Low temperature storage test
 Temperature -30 °C
 Duration 96hrs
- 3.3 Life test in normal temperature
 Power supply Rated voltage
 Duration 1000hrs
- 3.4 Life test in high temperature
 Temperature +70 °C
 Power supply 7V
 Duration 500hrs
- 3.5 Life test in low temperature
 Temperature -30 °C
 Power supply 4V
 Duration 500hrs
- 3.6 Temperature cycle test
 Cycles 5



All these tests above should be measured after leaving normal temperature for 2hrs.

- 3.8 Vibration Test
 Vibration Frequency 10~55Hz
 Amplitude 1.53mm
 Direction 3(x.y&z)
 Duration 2hrs each direction (total 6 hrs)
- 3.9 Drop test
 Height 70cm
 (to 10mm thickness woodenboard)
 Direction 3(x.y&z)
- 3.10 Solderability Test
 Soldering Temperature 255 °C
 Duration 3 sec

Notice: All specifications must be satisfied in this condition.

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4.Surface Mounting Condition

In automated mounting of The SMD Sound Transducers on printed circuit boards,any bending,expanding and pulling forces or shocks against the SMD Sound Transducers shall be kept minimum to preven them from electrical failures and mechanical damages of the devices.

Soldering(Reflow)

(1)Solderings of The SMD Sound Transducers shall conform to the soldering conditions in the individual specifications.

(2)The SMD Sound Transducers are designed for"Reflow Solderings"

(3)In the reflow solderings,too high soldering temperatures and too large tempearture gradient such as rapid heating or cooling may cause electrical failures and mechanical damages of the devices.

Follwing soldering conditions are recommend;Refer to Fig.1

Temperature profile for a lead-free reflow process

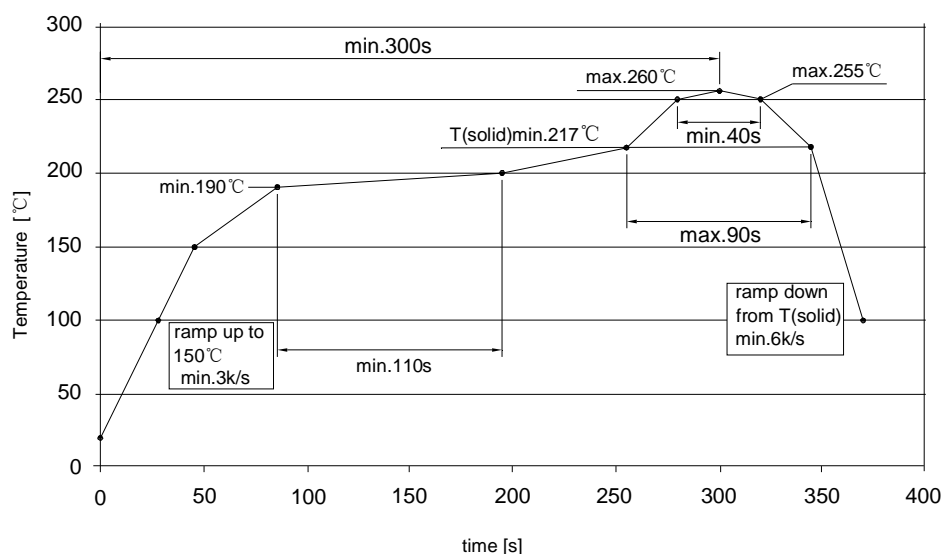


Fig. 1 Recommended soldering Temperature-Time profile (Reflow soldering)

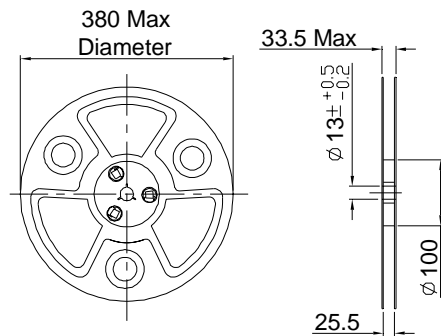
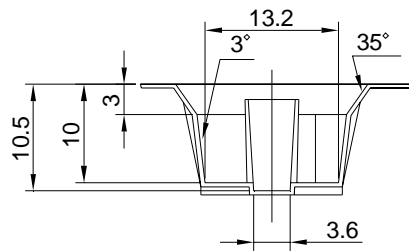
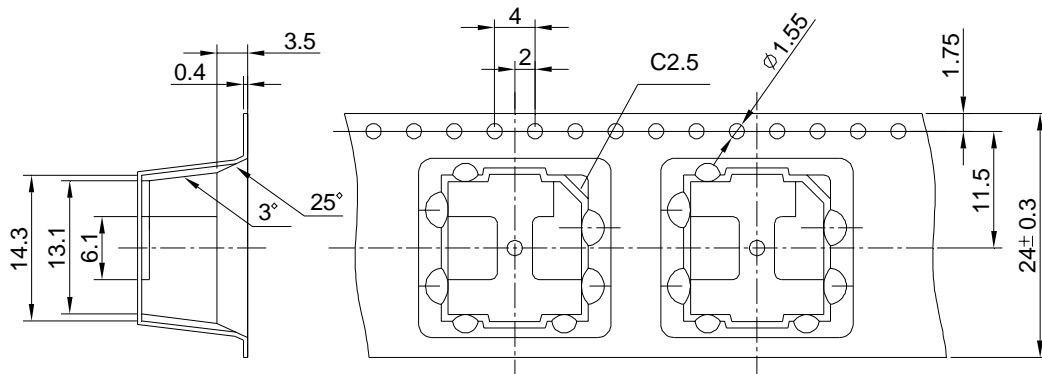
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5. Packing

5.1 Reel packing

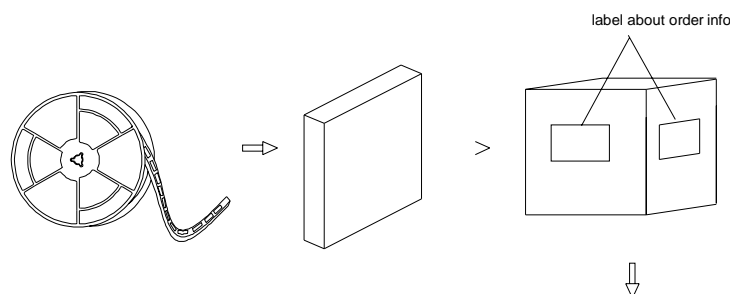
5.1.1 Reel drawing



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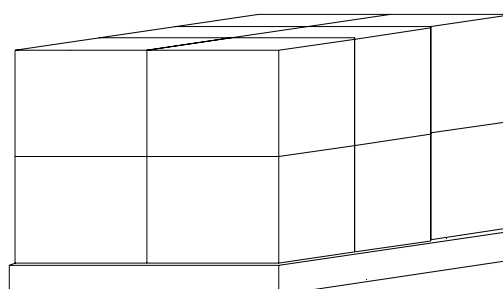
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6		5		4		3		2		1	

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5.1.2 Reel packing

- 1)280pcs/reel
- 2)6reel/carton
- 3)1680 pcs/carton in total
- 4)carton size 41 x 41 x 33cm



6.Notice

6.1 The products mustn't be washed

6.2 Storage Condition

The products should be stored in the room ,where the temperature/humidity is stable. And avoid such places where there are large temperature changes. Please store the products at the foll-owing conditions:

Temperature: -10 to + 40°C Humidity: 15 to 85% R.H.

6.3 Expire Date on Storage

Expire date (Shelf life) of the products is six months after delivered under the conditions of a sealed and an unopened package. Please use the products within six months after delivered.

If you store the products for a long time (more than six months), use carefully because the products may be degraded in the solderability and/or rusty.Please confirm solderability and characteristics for the products regularly.

6.4 Notice on Product Storage

(1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced at quality, and/or be degraded in the solderability due to the storage in a chemical atmosphere.

(2) Please use the products immediately after the package is opened, because the characteristics may be reduced at quality, and/or be degraded in the solderability due to storage under the poor condition.

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7. History change record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			01/07/04	王善梅	查红红
B		Add reel packing and RoHS	07/11/16	魏奉玲	张秀琴

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