### Description

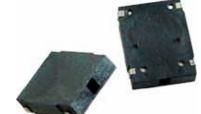
Specification Rated Voltage **Operating Voltage Rated Current Coil Resistance** Sound Output **Operating Frequency Operating Temperature Storage Temperature** Termination

**Construction Materials** 

Weight (Typical) Reliability

#### CSET14B05-30-2.7F: Chinasound SMD Electro-magnetic Transducer 14mm length, type A(=11mm width, 3.0mm height, 2.2x4.2mm sound hole ), 5Vo-p rated voltage - 30ohm coil resistance - 2.731KHz resonant frequency, Lead Free reflowing solderable, RoHS compliant

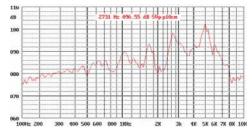
# **Picture**



### RoHS complaint

- Small size
- Reflowing Solderable
- Flame Retardant Plastic
- Tape and reel packaging for auto mounting

#### Characteristics

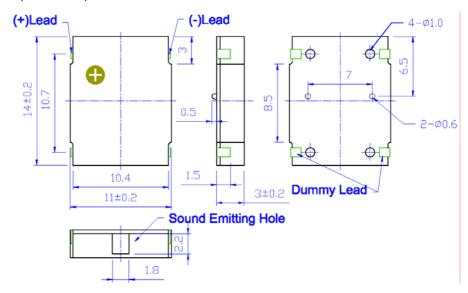


|                        | 5 Vo-p square wave, 1/2 duty square wave   |
|------------------------|--|
|                        | 3~7 Vo-p square wave, 1/2 duty square wave   |
|                        | 80 mA max. at 3 Vo-p square wave, 1/2 duty square wave, 2731Hz   |
|                        | 30+/-3 ohm   |
|                        | 90dB min. (Typ. 95 dB) at 5 Vo-p square wave, 1/2 duty square wave, 10cm, 2731Hz   |
|                        | 2731+/-500Hz   |
|                        | -30 °C to +85 °C   |
|                        | -40 °C to +90 °C   |
| Description            | 4 soldering pads, Sn plated Brass  |
| Case                   | Plastic, LCP Vectra E130i  |
| Diaphragm              | Ni Alloy Disc N50  |
| Diapinagin             | 1.0 g  |
| *Life Test             | At 3 Vo-p in room temperature continuously for 1000 hours  |
|                        | no function at $+90^{\circ}C \pm 2$ for 96 hours, function at $+85^{\circ}C \pm 2$ for 96 hours,   |
| *High Temperature      |  |
| *Low Temperature       | no function at -40 °C $\pm$ 2 for 96 hours, function at -30 °C $\pm$ 2 for 96 hours,   |
| *Humidity              | 25 °C ±2 °C, 90-95%RH, 5hr→up to 55 °C ±2 °C, 90-95%RH, 0.5hr →55 °C ±2 °C,  |
| -                      | 90-95%RH, 5hr $\rightarrow$ down to 25 °C ± 2 °C, 90-95%RH, 0.5hr, 10 cycles   |
| *Thermal Shock         | $-40^{\circ}C \pm 2^{\circ}C, 30min \rightarrow +20^{\circ}C, 15min, \rightarrow +85^{\circ}C \pm 2^{\circ}C, 30min \rightarrow +20^{\circ}C, 15min, 5 \text{ cycles}$ |
| *Vibration             | 1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular direction for 2  |
| vibration -            | hrs  |
| *Shock                 | 98m/s <sup>2</sup> (=10g) shock for each mutually perpendicular directions, half sine wave, 3 times  |
|                        | each   |
| *Drop Test             | Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2   |
|                        | directions – upper and side of the part are applied  |
| **Termination Strength | Maximum of 9.8N (1kgs) for 10 seconds load pull test   |
| ***Soldering Heat      |  |
| Resistance             | Samples put through reflowing soldering oven 2 twice   |
| ****Solderability      | Samples put through reflowing soldering oven 1 times   |
|                        | For a period of one (1) year from date of manufacture under normal operations  |
|                        |  |

#### Warranty

\* Being placed for 4hours at +25 °C, part shall be measured. The value of frequency and current consumption shall be in ±10% compared with initial value. The capacitance should be in  $\pm 20\%$  compared with initial value. The SPL shall be in  $\pm 10dB$  compared with initial value. \*\*\* No damage and cut off \*\*\*No interference in operation \*\*\*\*90% min. soldering pads shall be with solder. (except the edge of pad)

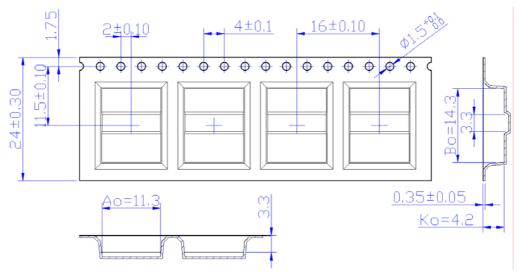
#### Dimensions (Unit: mm)



All specifications are subject to change without notice

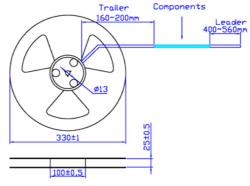


# Tape & Reel Dimensions (Unit:mm)

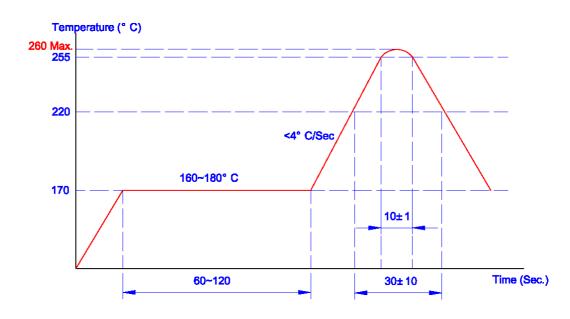


### NOTE:

- 1.10 sprocket holes pitch cumulative tolerance  $\pm 0.20$  mm.
- 2.Carrier camber not to exceed 1 mm in 100 mm.
- 3. Ao & Bo measured on a place 0.3mm above the bottom of the pocket
- 4. Ko measued from a plane on the inside bottom of pocket to the top surface of the carrier.
- 5. All dimensions meet EIA-481-2-A requirements.
- 6. Material: Black Conductive Polystyrene Alloy.
- 7. Component loaded per 13" reel: 1000pcs.



# **Recommend Reflowing Profile**

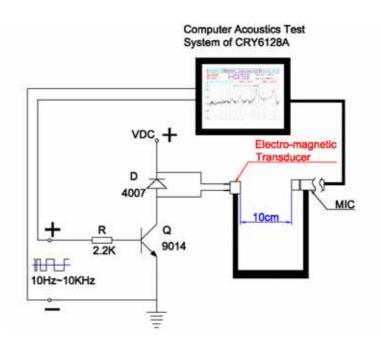


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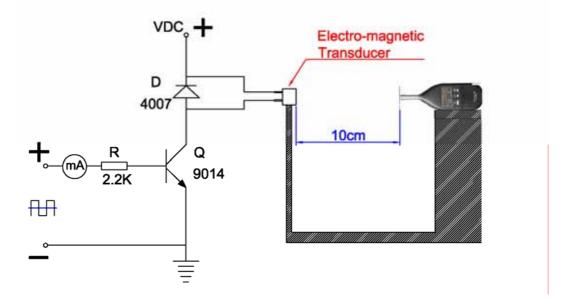
Chinasound

# Test Methods

SPL1: Tested by Computer Acoustics Test System of CRY6128A



SPL2: Tested by Sound level meter B&K2240



All specifications are subject to change without notice

