# Description

CSET12-140-2.4F: Chinasound SMD Electro-magnetic Transducer 12.8(<13mm) length & width, type A(=10mm height), 12Vo-p rated voltage - 140ohm coil resistance - 2.4KHz resonant frequency, Lead Free reflowing solderable, RoHS compliant

## Picture

Case

\*Shock

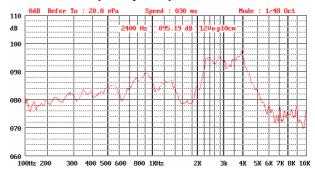
## Specification

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

Weight (Typical) Reliability

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

### **Frequency Response Curve**

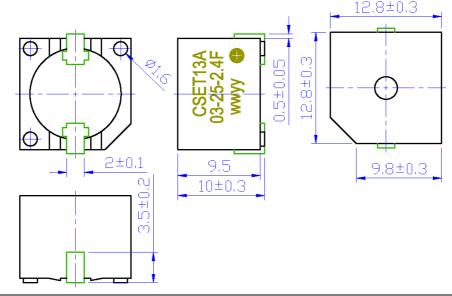


12 Vo-p square wave, 1/2 duty square wave 8~16 Vo-p square wave, 1/2 duty square wave 40 mA max. at 12 Vo-p square wave, 1/2 duty square wave, 2400Hz 140+/-14 ohm 90dB min. ( Typ. 93 dB ) at 12 Vo-p square wave, 1/2 duty square wave, 10cm, 2400Hz 2400+/-500Hz -30 °C to +85 °C -40 °C to +90 °C Description 4 soldering pads, Sn plated Brass Plastic, LCP Vectra E130i Diaphragm Ni Alloy Disc N50 2.8 a \*Life Test At 12 Vo-p in room temperature continuously for 1000 hours \*High Temperature no function at +90+/-2 °C for 96 hours, function at +85+/-2 °C for 96 hours, \*Low Temperature no function at -40+/-2 °C for 96 hours, function at -30+/-2 °C for 96 hours, 25+/-2°C, 90-95%RH, 5hr→up to 55+/-2°C, 90-95%RH, 0.5hr →55+/-2°C, 90-95%RH, \*Humidity 5hr→down to 25 +/-2 °C, 90-95%RH, 0.5hr, 10 cycles \*Thermal Shock -40+/-2 °C, 30min $\rightarrow$ +20 °C,15min, $\rightarrow$ +85+/-2 °C, 30min $\rightarrow$ +20 °C,15min, 5 cycles \*Vibration 1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular direction for 2 hrs 98m/s<sup>2</sup> (=10g) shock for each mutually perpendicular directions, half sine wave, 3 times each Dropped naturally from 750mm height onto the surface of 10mm wooden board. 2 directions -\*Drop Test upper and side of the part are applied \*Soldering Heat Resistance Samples put through reflowing soldering oven 2 twice \*\*Solderability Samples put on PCB with solder paste through reflowing soldering oven 1 times For a period of one (1) year from date of manufacture under normal operations

#### Warranty

\* All specifications must be satisfied after the test (Recovery:2 to 4 hrs of recovery under the standard condition after the removal from test chamber). \*\*90% min. soldering pads shall be with solder.(except the edge of pad)

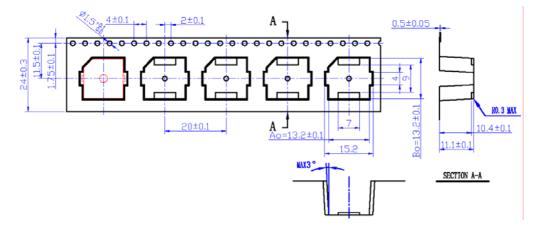
## Dimensions (Unit: mm)



All specifications are subject to change without notice

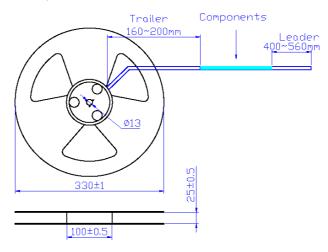
# [hinaSoup]

## Tape & Reel Dimensions (Unit:mm)

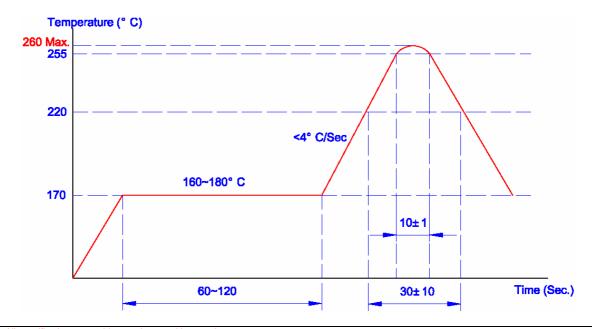


NOTE:

- 1. 10 sprocket hole pitch cumulative tolerance+/-0.20mm.
- 2. Carrier camber is 1 mm in 100 mm.
- 3. A0 and B0 measured on a plane on a place 0.30mm above the bottom of the pocket.
- 4. K0 measured from a plane on the inside bottom of the pocket to the top surface of the carrier.
- 5. All dimensions meet EIA-481-2-A requirements.
- 6. Component load per 13" Reel: 300 pcs.



**Recommend Reflowing Profile** 



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