

**Description**  
**CSPT12D05-4.0F:**

Chinasound SMD Piezo Transducer 12mm length, type D(=12mm width, 3.0mm height, bottom side sound hole), 05Vp-p rated voltage – 4.0KHz resonant frequency, lead Free reflowing solderable and RoHS compliant

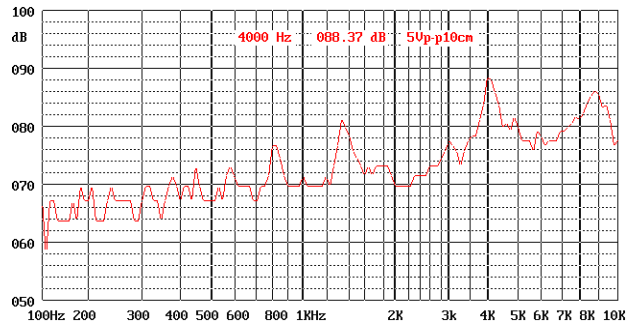
◆ **RoHS compliant**

- ◆ Reliable Solid State Piezoelectric Technology
- ◆ Corrosion Resistance Diaphragm
- ◆ Flame Retardant Plastic
- ◆ Tape and reel packaging for auto mounting

**Picture**



**Characteristics**



**Specification**

- Operating Voltage
- Operating Frequency
- Typical Sound Output
- Rated Current
- Capacitance
- Operating Temperature
- Storage Temperature
- Termination
- Construction Materials

Weight (Typical)

Reliability

Description  
Case  
Diaphragm

\*Life Test

\*High Temperature

\*Low Temperature

\*Humidity

\*Thermal Shock

\*Vibration

\*Shock

\*Drop Test

\*Soldering Heat  
Resistance

\*\*Solderability

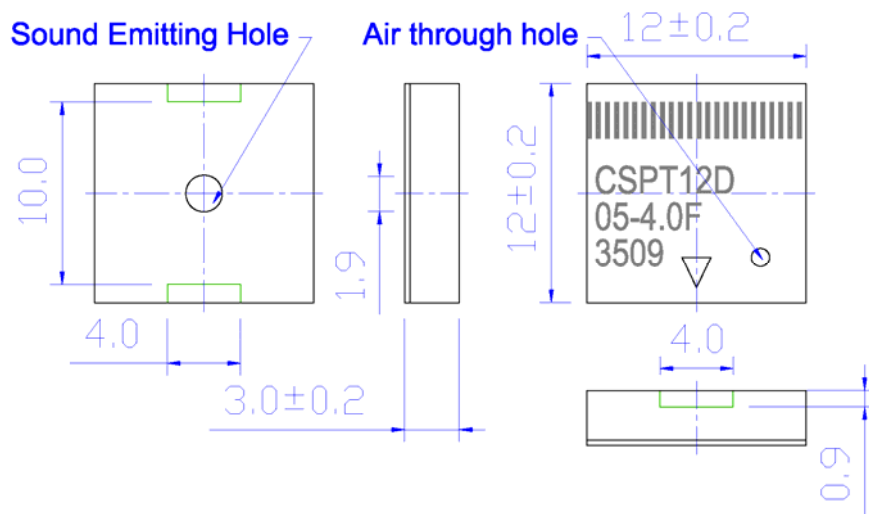
20 Vp-p max.  
4,000+/-500Hz  
88+/-5dB min. at 5Vp-p 10cm 4KHz 25 °C  
1mA at 5Vp-p  
15,000+/-30% pF at 100Hz 1Vrms  
-40 °C to +105 °C  
-40 °C to +120 °C  
2 soldering pads, Sn plated Brass  
Plastic, LCP Vectra E130i  
Ni Alloy Disc N42  
0.8g  
At 5 Vp-p, 1 minutes ON 1 minutes OFF in room temperature continuously for 1000 hours  
No function at +120+/-2 °C for 240 hours; Function at +105+/-2 °C for 240 hours  
No function at -40+/-2 °C for 240 hours; Function at -40+/-2 °C for 240 hours  
+40 +/-2 °C, 95+/-5%RH, 240 hours  
-40 +/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr → +105+/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr.  
Temperature Go up or Drop time is 0.5 hr. 3 hrs per 1 cycle. Total is 5 cycles  
1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours  
980m/s<sup>2</sup> (=100g) 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 – upper and side of the part are applied  
Samples put through reflowing soldering oven 2 times  
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, tolerance without defined in drawings: +/-0.5mm)



All specifications are subject to change without notice

Composed by: Jack Guo/090817 Checked by: Gao CL,Gong YS,Zhu YC/090817 Approved by: Wang Z/090817



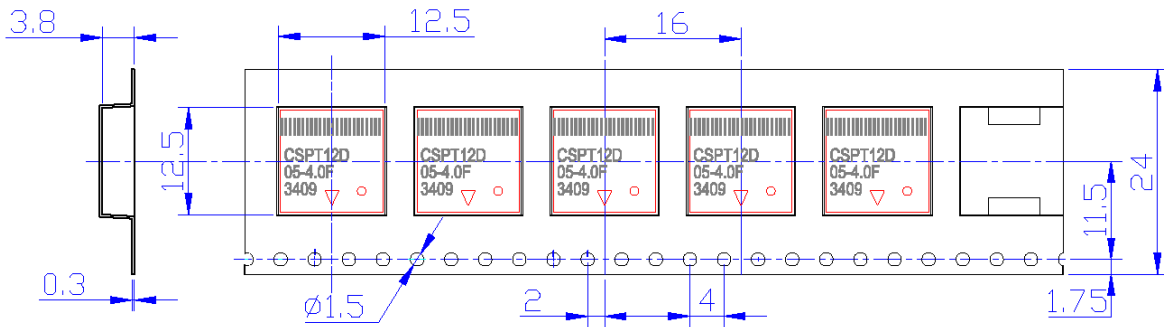
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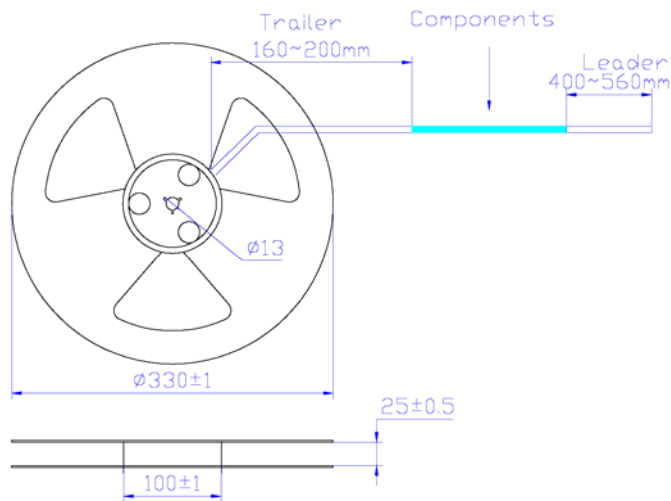
email: [csound@jmail.com.cn](mailto:csound@jmail.com.cn)

**Tape & Reel Dimensions (Unit:mm)**

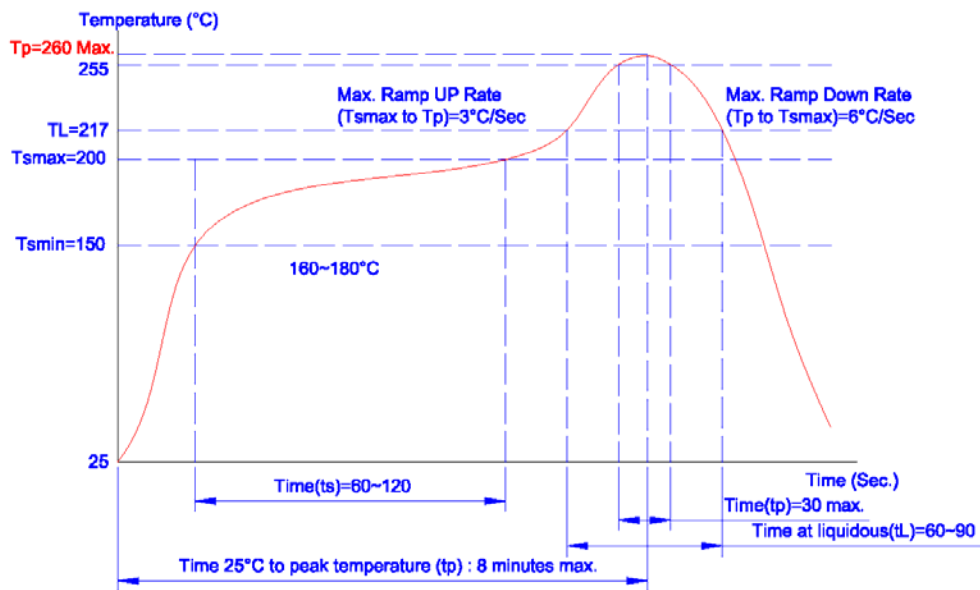


**NOTE:**

1. 10 sprocket hole pitch cumulative tolerance +/-0.20mm.
2. Carrier camber not to exceed 1 mm in 100 mm.
3. All dimensions meet EIA-481-2-A requirements.
4. Thickness: 0.40+/-0.05 mm.
5. Component loaded per 13" reel: 1000 pcs.



**Recommend Reflowing Profile** as per IPC/JEDEC J-STD-020D



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## Revision History

Version Number	Description	Name
090817	Original RoHS compliant version, CSPT12D05-4.0F	Jack Guo