

Description

Chinasound Piezo Element 19.9(<20)mm diameter, Ni alloy basic disc – 3.6KHz resonant frequency, type A1 (=without feedback, super thin type) – Spring terminals, 2.2mm height, type E (=1.5mm diameter gold plated springs, protective decal, visible glue fillet), RoHS compliant

◆ RoHS compliant

◆ Reliable Solid State Piezoelectric Technology

Specification

Resonant Frequency	3,600+/-500Hz
Resonant Impedance	1,500 Max. ohm
Capacitance at 100Hz	20,000+/-30% pF at 100Hz 25 °C
Input Voltage	30Vp-p Max., square wave
Insulated Resistance	5M ohm Min.
Operating Temperature	-20 °C to +60 °C
Storage Temperature	-30 °C to +70 °C

Termination	Description	3 Springs, gold plated
Construction Materials	Case	No
	Diaphragm	Ni Alloy Disc N42 or equal
Weight (Typical)		0.6 g

Special Requirement **Contact Adhesion**
 Spring contacts shall be mounted such as to withstand a 3N pull force perpendicular and away from the metal disc and a 5N shear force parallel to the metal disc at any direction Before springs soldered: Ceramic disc should be securely adhered to metal disc to guarantee that (1) a glue fillet shall be visible and support the circumference of the ceramic disc; (2) Ceramic may crack but must not break loose of the metal disc or expose shards of broken material exceeding 1mm in width when bent around a metal rod of 14mm diameter

Ceramic Adhesion

After springs soldered: Ceramic shall be securely adhered to the metal disc such that shock and vibration consistent with ultrasonic welding and an instrument drop test will not cause broken pieces of ceramic to fall off the metal disk.

Decal

A 0.05 – 0.10mm thick plastic decal (color option) backed with 3M Type 467 self adhesive shall be placed over the ceramic disc as shown in drawing below. Placement of Decal shall be within 1mm of center and no part of Decal shall touch any of springs and encroach on the index notch

Reliability

Packing

- *High Temperature
- *Low Temperature
- *Humidity
- *Thermal Shock

Trays, springs side up
 no function at +70+/-2 °C for 240 hours, function at +60+/-2 °C for 240 hours,
 no function at -30+/-2 °C for 240 hours, function at -20+/-2 °C for 240 hours,
 +60+/-2 °C, 95+/-5%RH, 240 hours

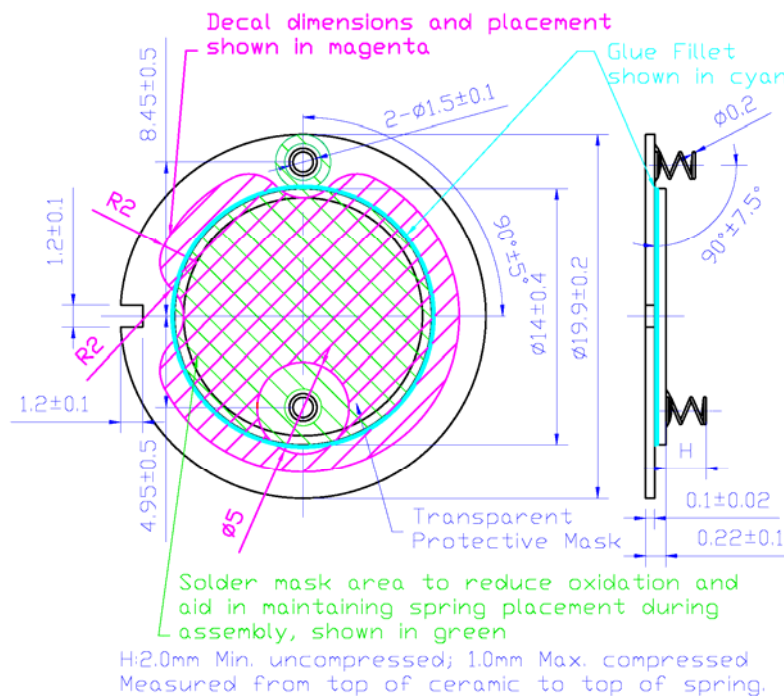
- *Sock
- *Shock

-20+/-2 °C 0.5 hr → +25+/-2 °C 0.25 hr → +60+/-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
 +50 °C±2 °C, 90–95%RH, 16hrs followed by +30 °C±2 °C, 90–95%RH, 8hrs , 5 cycles
 10g, 3 times 11ms by half sine wave shock for each 3 mutually perpendicular axis
 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).

Dimensions (Unit:mm, Tolerance: +/-0.3mm)



All specifications are subject to change without notice

Composed by: Guo J/051126 Checked by: Gao CL, Gong YS, Zhu YC/051126 Approved by: Wang Z/051126



CHANGZHOU CHINASOUND ELECTRONICS CO., LTD.

Tel: +86-519-86182518 Fax: 86182519

http://www.chinasound.com

email: csound@jsmail.com.cn

Revisions History

Version Number	Description	Name
020619	Original, CPE-20N-3.6A1-S	Guo Jun
040901	Decal is added, CPE-20N-3.6A1-S2.2E	Guo Jun
051126	Switched to RoHS complaint, CPE20N-3.6A1-S2.2ER	Guo Jun