# Description

Specification

Picture

# CSPT22A12-4.0F:

Chinasound SMD Piezo Transducer 22mm diameter, type A(=7mm height) , 12Vp-p rated voltage - 4.0KHz resonant frequency, lead Free reflowing solderable and RoHS compliant

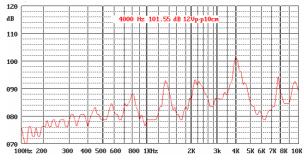
## RoHS compliant

Reliable Solid State Piezoelectric Technology

Version:060908

- Corrosion Resistance Diaphragm
- Flame Retardant Plastic
  - Tape and reel packaging for auto mounting

# **Frequency Response Curve**

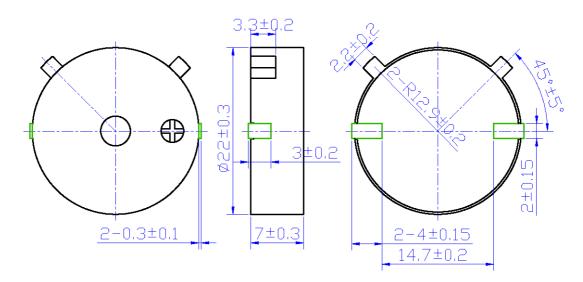


Rated Voltage		12 Vp-p
Operating Voltage		1 ~ 25 Vp-p
Operating Frequency		4000+/-500Hz
Typical Sound Output		90dB min. (100dB typ.) at 12Vp-p 10cm 4.0KHz 25 ℃
Rated Current		3mA at 12Vp-p
Capacitance		15000+/-30% pF at 100Hz 1Vrms
Operating Temperature		-30 °C to +85 °C
Storage Temperature		-40 °C to +90 °C
Termination	Description	2 soldering pads, Sn plated Brass
<b>Construction Materials</b>	Case	Plastic, PPS A7-03A
	Diaphragm	Ni Alloy Disc N42
Weight (Typical)		2.8g
Reliability	*Life Test	At 12 Vp-p in room temperature for 1000 hours
-	*High Temperature	No function at +90+/-2 °C for 240 hours; Function at +85+/-2 °C for 240 hours
	*Low Temperature	No function at -40+/-2 °C for 240 hours; Function at -30+/-2 °C for 240 hours
	*Humidity	+40+/-2°C, 95+/-5%RH, 240 hours
	*Thermal Shock	-30+/-2 °C 0.5 hr $\rightarrow$ +25+/-2 °C 0.25 hr $\rightarrow$ +85+/-2 °C 0.5 hr $\rightarrow$ +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
	*Vibration	1.5mm with 10 to 50Hz of vibration frequency to each of 3 perpendicular directions for 2 hours
	*Shock	$980m/s^2$ (=100g) shock for each mutually perpendicular directions, half sine wave, 3 times each
	SHOCK	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
Warranty		For a period of one (1) year from date of manufacture under normal operations
*All consifications must be	actisfied after the test (Recover	are to 4 broad recovery under the standard condition after the removal from test chember)

### Warra

\*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)

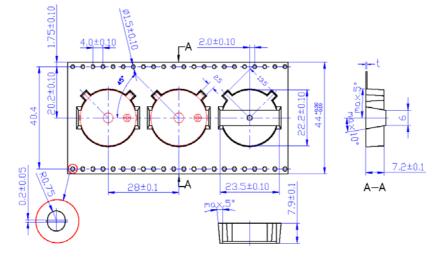
# **Dimensions** (Unit:mm)



All specifications are subject to change without notice

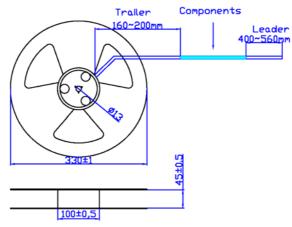
# ChinaSound

Tape & Reel Dimensions (Unit:mm)

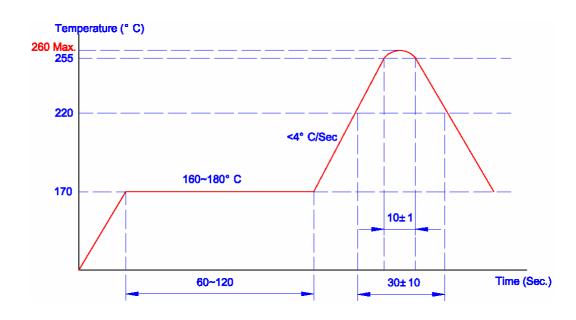


NOTE:

- 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: 300 pcs.



**Recommend Reflowing Profile** 



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