Date : 21. Feb. 2006

Drawing No . : A S - A 5 0 3 1

Messrs. Transtekne International Inc.

A P P R O V A L S H E E T

Model Name: Piezoelectric Buzzer With Built-in Circuit			
_			
Parts No	: CPM121A1AW P T- S 01		
		\neg	
	Please sign one copy and return it to us by mail;		
	keep the other copy for your files.		

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NIHON CERATEC CO.,LTD

PIEZO ELECTRIC DIVISION

Approved	Checked	Drawing

l.Subject	
This specification will apply to I	Piezoelectric Buzzer
CPM121A 1 AWPT- S 01	
2.Purchaser	
2.2 Part No	
3.Supp1ier	
	S01
4.Scope	
4.1 Appearance.Dimensions	
As per attached drawing No,	AS-A5031 7/7
4.2 Test Conditions	
All measurements shall be ma	nde ambient temperature of 25 ± 5
and may also be permissible ir	n between 5 - 35 relative humidity
65% unless otherwise specified	herein.
4.3 Electrical Characteristics	
(1)Sound Pressure Level (S	PL) : 81 dB min.(at 12VDC)
(2)Oscillating Frequency (For	sc) 4.2 ± 0.5 kHz
(3)Current Consumpting	: 8 mA max.
(4)Operating Voltage	: 3 ~ 15 VDC
(5)Operating Temperature R	ange: -20 ~ +70
(6)Storage Temperature	: -30 ~ +80
(7)Operating Humidity	: 80%RH max. (at 40 , No condence)

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5.Test Method

5.1 Electrical Characteristics test method

item	condition		
5.1.1	Anechoic chamber		
Sound Pressure level & Oscillating Frequency	P.S. ; Signal Generator.		
	P.B. ; Piezo Electric Buzzer		
	SCM; Standard condenser microphone		
	SPLM; Sound pressure Level Meter RION NA-40		
	F.C.; Frequency Counter		

6. Evaluation Testing

Test is done with JIS Z-9015-sampling plan for inspection by lot tolerance percent defective method.

	Item	method	level	A Q L
1	Appearance, Configuration	visual	S-3	0.65%
2	Sound pressure Level	item 5.1	S-3	0.65%
3	Size	direct	n=5	(0.1) limit
4	Oscillating Frequency	item 5.1	S-3	0.65%

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7. Packing:

Units Shall be packed for shipping and storage so as not to be damaged, identifying by labeling with manufacturer's name, part No, lot No, and quantity.

8 Note

- 8.1 Caution in case of mounting and handling.
 - (1) To prevent malfunctions, install the buzzer so that it does not come into contact with other components on its side or top surface.
 - (2) There should not be any obstacle within 15mm from the top of the buzzer. Also, There should not be covered the sound opening with an adhesive tape or the like. If the sound hole is blocked, the buzzer may habit abnormal oscillation or stop functioning.
 - (3) The buzzer can not be soldered by flow and reflow. In case of flow and reflow soldering, the case may be deformed.
 - (4) Do not use the wrong polarity. If the buzzer is improperly connected. the internal circuit may break down when electricity is applied.
 - (5) Use the buzzer within the operation voltage range. A higher voltage may amage the diaphragm and other components or cause a fire. With a lower voltage, the sound may not be produced.
 - (6) Use a low-impedance (not more than 100)power supply for the buzzer. otherwise, the buzzer may exhibit abnormal oscillation or stop functioning.
 - (7) The buzzer is built in complete circuit.; so there is no need for another circuit for generating sound, Do not interpose a resistance in series between the buzzer and the power supply, because this will produce irregular oscillation. When resistor is necessary to control sound volume, use capacitor($1 \mu F$) parallel with the buzzer together.
 - (8) Do not apply strong force to the pins before they are soldered. If the pins are bent or cut due to excessive force, the buzzer may not generate sound.

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- (9) The installation position of the buzzer and acoustic impedance of the surrounding affect the sound. Please pay attention to appropriate setting.
- (10) Do not use the buzzer in a corrosive ambience, such as an ambience containing sulfur hydrides. Otherwise, a normal sound may not be generated due to corrosion of the components and diaphragm.
- (11) When washing, be sure that a solvent or the vapor of a solvent does not infiltrate the buzzer, so preventing deterioration and damage by the solvent trapped inside the casing.
- (12) Do not drop the buzzer.
- (13) Take special protective measures to prevent deterioration and breakdowns, whenever the buzzers are used in the following unfriendly areas:

Dusty places Moist places

Hot or frosty places Humid places

- (14) When operating the buzzer outdoors, protect it from moisture to ensure normal operation.
- (15) The buzzer is intended for applying to personal computers, office automation units, communication units, audio-visual units, amusement units and other general household electrical appliances, no applying medical units, aeronautics units, space units and so on.

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8.2 Caution in case of storing

To prevent deterioration and breakdowns, do not store units in the following places:

Dusty places

Hot or frosty places.

Areas exposed to sunlight

Places with leaking or infiltrating water

Humid places

Areas exposed to solvents or their vapor

Areas exposed to corrosive gases, such as H2S

8.3 Other Precautions

- (1) Do not disassemble, repair or modify the buzzer, to maintain the initial performance and safety standard of it.
- (2) The products contain the lead so that the disposal of industrial wastes has to be required.

9. General requirements:

- (1) In the case of different interpretation in this specification, discussions shall be made to agree each other.
- (2) With the worrying which exerts an influence on the efficiency being under for the material and the process change which is thought of, we make to cope after contacting(in the eye place of 2 months before) beforehand to you.
- (3) The buzzer is RoHS compliant.

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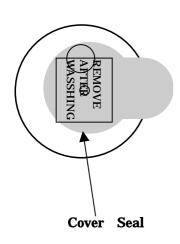
Drawing No. AS-A5031

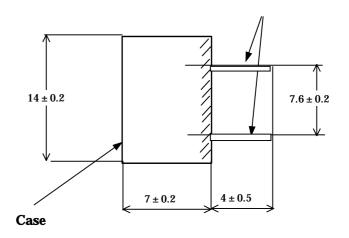
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Appearance and dimensions(unit: mm)

Part No. CPM121A1AWP - S01

Terminal Pin 0.7 ± 0.1





(1) Material

Case : PPO(Black)

Terminal: Brass (Sn/Cu Plated)

Potting Resin: Epoxy resin (Black)

Polarity distinction

Polarity is indicated at the surface of the case. (+)

(2) Appearance

There are no remarkable dirt, crack and crack detrimental to a performance.

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