



## PRODUCT SPECIFICATION

Product Name: Piezo Buzzer

Part Number: MSPS36B30P14V12FP

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## 1. Electrical and acoustical specification

No.	Item	Specification
1-1	Min. Sound Pressure Level	90dB/12VDC /30cm
1-2	Rated Voltage	12VDC
1-3	Operating Voltage	5~ 28VDC
1-4	Max. Consumption	10mA/12VDC
1-5	Oscillating Frequency	3.0± 0.5kHz
1-6	Tone Nature	Continuous+ Fast Pulse(sounding 3.3± 20% times per second)
1-7	Operating Temperature	-20~+70°C
1-8	Case Material/Color	PC/Black
1-9	Weight	23g
1-10	Pin Strength	More than 10N

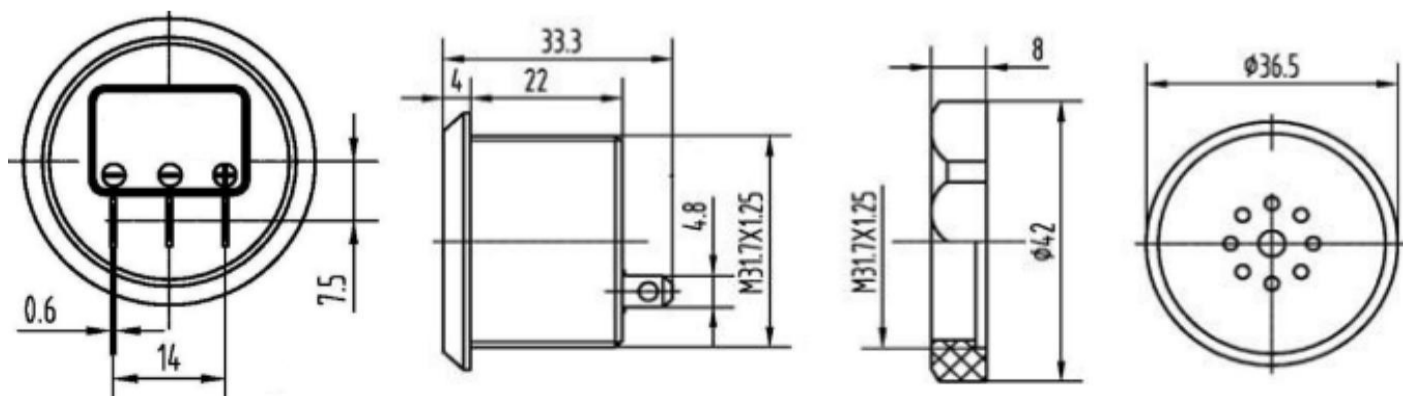
### NOTES:

1. Fast Pulse  $f_F=3.3\text{Hz}\pm 20\%$

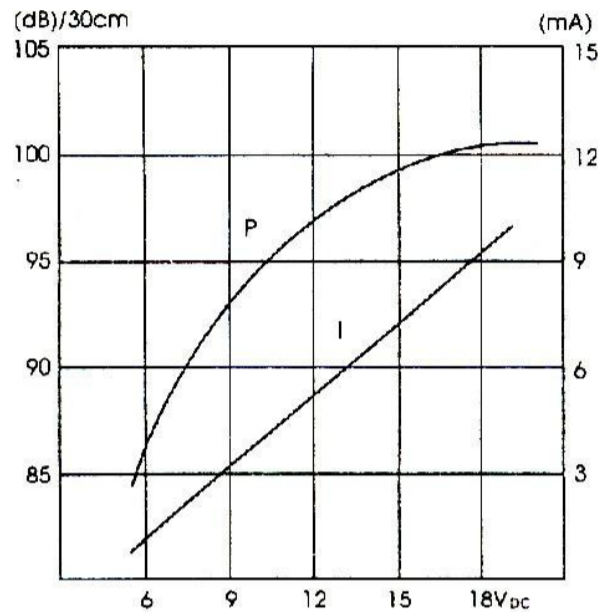
2. This series is epoxy-potting type.

3. Test should be made under the conditions of room temperature ( $20\pm 10^\circ\text{C}$ ), normal humidity ( $60\pm 20\%$ ) and normal atmospheric pressure. In this case, however, that the judgment is questionable, the test conditions are to be changed to room temperature  $20\pm 2^\circ\text{C}$ , relative humidity 60~70% and normal atmospheric pressure

## 2. Dimension Drawing (Unit: mm)



### 3. Typical Frequency Response Curve



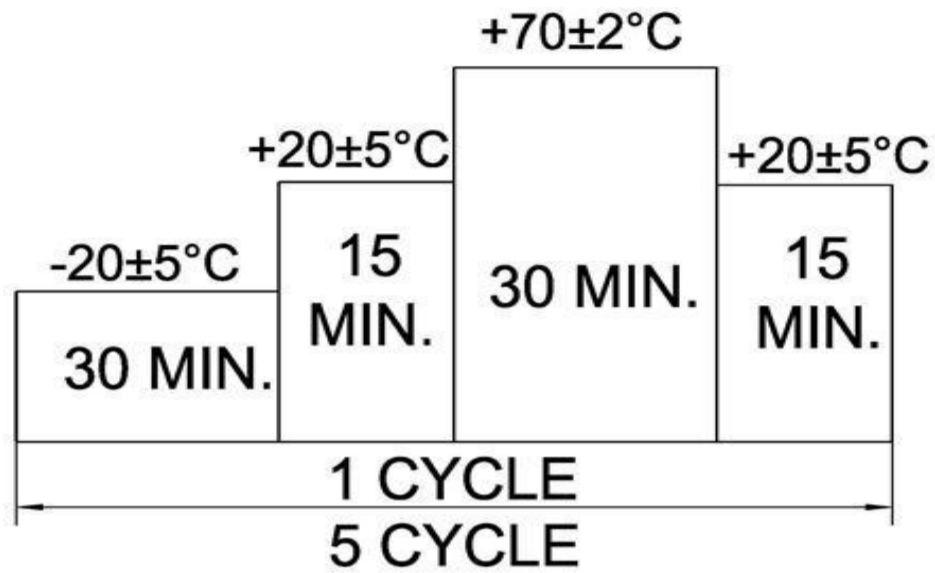
Note: Distance 30 cm

### 4. Reliability Test

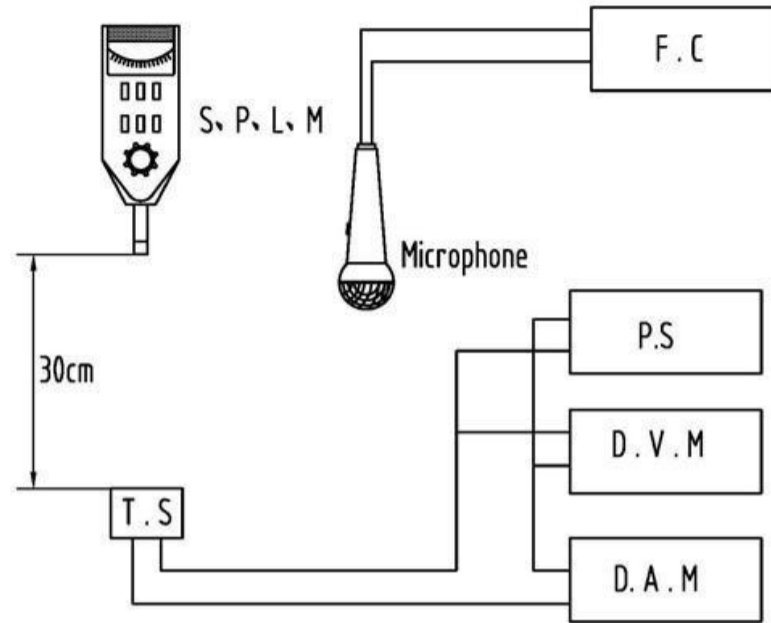
No.	Item	Method of Test	Tolerance after Testing
4-1	Operating Temperature	-20~+70°C	Sound pressure level initial value $\pm 10$ dB Max. consumption value $\pm 20\%$ Oscillating frequency value $\pm 20\%$
4-2	Storage in high temperature	Storage in +70°C test box 96 hours then exposed to the room temperature for 2 hours	
4-3	Storage in low temperature	Storage in -20°C test box 96 hours then exposed to the room temperature for 2 hours	
4-4	Life test in the room temperature	Operate the product continuously 5 seconds on 5 seconds off 300 hours at rated voltage	
4-5	Temperature / humidity cycle test	Storage in +40°C, 93 $\pm$ 3%RH test box 96 hours then exposed to the room temperature for 2 hours	
4-6	Temperature (high and low) cycle test	Conduct the test for 5 cycles without applying power then expose to the room temperature for 2 hours. (See Figure 4-6)	
4-7	Vibration test	Conduct the test for the directions of X Y and Z for 0.5 hour each (total 1.5 hours). To-and Fri sweep time (from 10 to 55Hz and then 55 to 10) under single amplitude of 0.75mm is 3 minute, then expose to the room temperature for 2 hours	

4-8	Drop test	Drop a product naturally from the height of 700mm onto the surface of 100mm thick wooden board. Two directions: upper and side of the product are to be applied for this drop test once respectively	
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Figure 4-6



## 5. Electrical Testing Method



S.P.L.M	Sound Pressure Level Meter
T.S	Testing Sample
F.C	Frequency Counter
P.S	Power Supply
D.V.M	DC Voltage Meter
D.A.M	DC Ampere Meter

## 7. Packing Information

Packing: 300 pcs per export carton Carton

Size: 47× 30.5× 27 cm

G. Weight: 8.4 kgs N. Weight: 6.9 kgs