

Electrical and Acoustical Parameter

Rated voltage (V)	12.0
Operating voltage (V)	8.0 – 16.0
Coil resistance (Ω)	110±10
Sound pressure level (dBA/10cm) *	87 - 93
Current consumption (mA)**	<55
Resonant Frequency (Hz)	740

Remark: * Value applying at 740Hz, square wave 12V with 15% duty cycle.
 **Value applying at 1000Hz, square wave 12V with 1/2 duty cycle.

Mechanical, Enviromental Parameter

Contact / Wire	Pin
Operating temperature (°C)	-40 to +85
Storage temperature (°C)	-40 to +85
Material housing	PPO
Color Housing	Black
Component weight (g)	8.0

Remark:

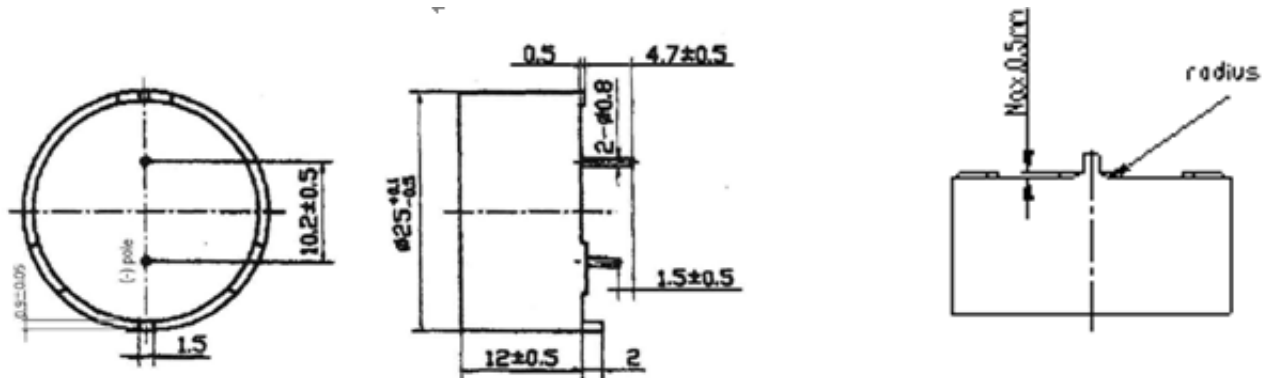
Approval

RoHs	<input checked="" type="checkbox"/>
UL	<input type="checkbox"/>

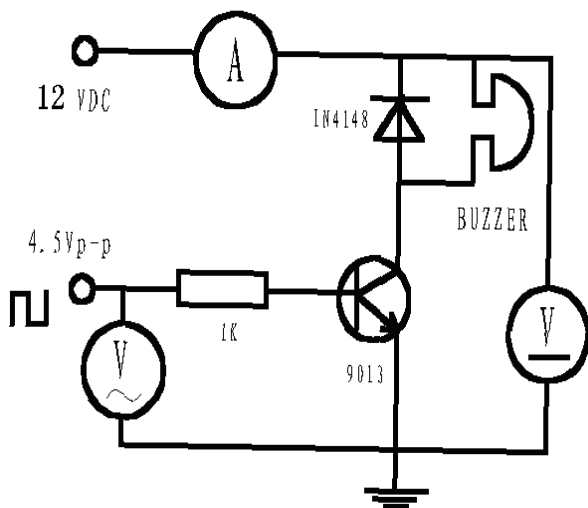
Designed by	MZ	28.07.2011	Dimensions without tolerance ±0.3mm	Index: 00	Current date
Released by	PB	28.07.2011	110728.1BDB		28.07.2011
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Drawing of Component

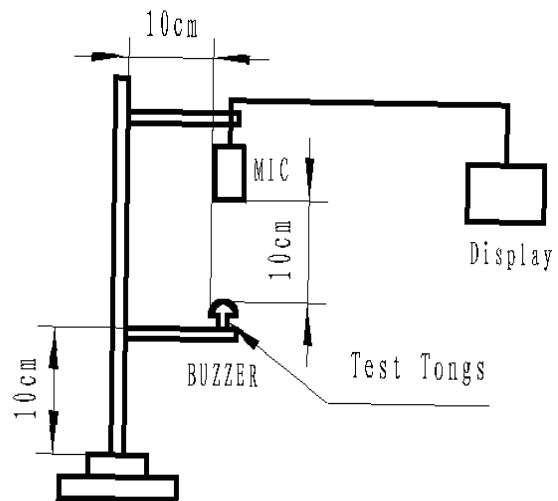
Unit:mm Tolerance: ±0.5mm Except Specified



Test Method



Test Circuit



Test Equips

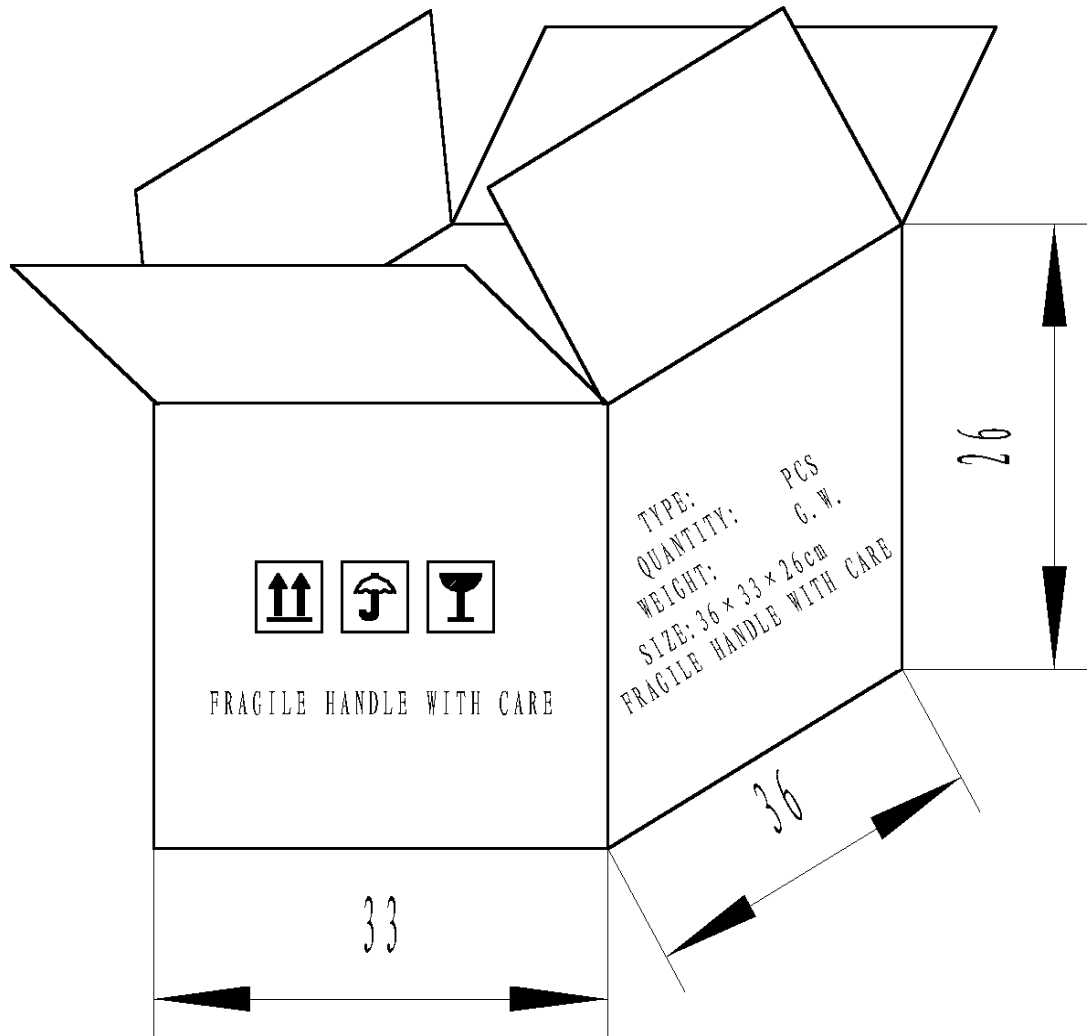
Designed by	MZ	28.07.2011	Dimensions without tolerance $\pm 0.3 \text{mm}$	Index: 00	Current date
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Reliability Test

NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	Humidity	40±5°C, 93(+2/-3)%RH, 96HRS	Sound pressure level initial value±10dB Max. current value±1mA Oscillating frequency value±300Hz.
2	High temp.	+85±2°C, 96HRS	
3	Low temp.	-40±2°C, 96HRS	
4	Temperature Cycling	-40±2°C, 30minutes room temp. 15 minutes +85±2°C, 30 minutes room temp. 15 minutes 5 cycles	
5	Drop test	3 times from height of 70cm onto the surface of 10mm thick wooden board.	
6	Vibration test	Make the test for the directions of X Y and Z (total 0.5 hours). To-and-fro. sweep time (from 10 to 55 Hz and then from 55 to 10Hz) under single amplitude of 1.0mm is 1 minute.	
7	Solder heat resistance	The part leads (pins) shall be immersed in molten solder maintained at 250±10°C for a period of 30 seconds.	

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Packaging Information



NOTES:

1. 50 PCS per bag
2. Total 20 bags per box
3. Total 1000 PCS box
4. Volume: 36 × 33 × 26cm

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Revision Table

Index Nr.	Date Reason - Procedure Change description	Drawing Date	implementation	Comments
			LS-Nr.: Date	