



PRODUCT SPECIFICATION

Product Name: Piezo Buzzer

Part Number: MSPS23B33W100V12

Document No: _____

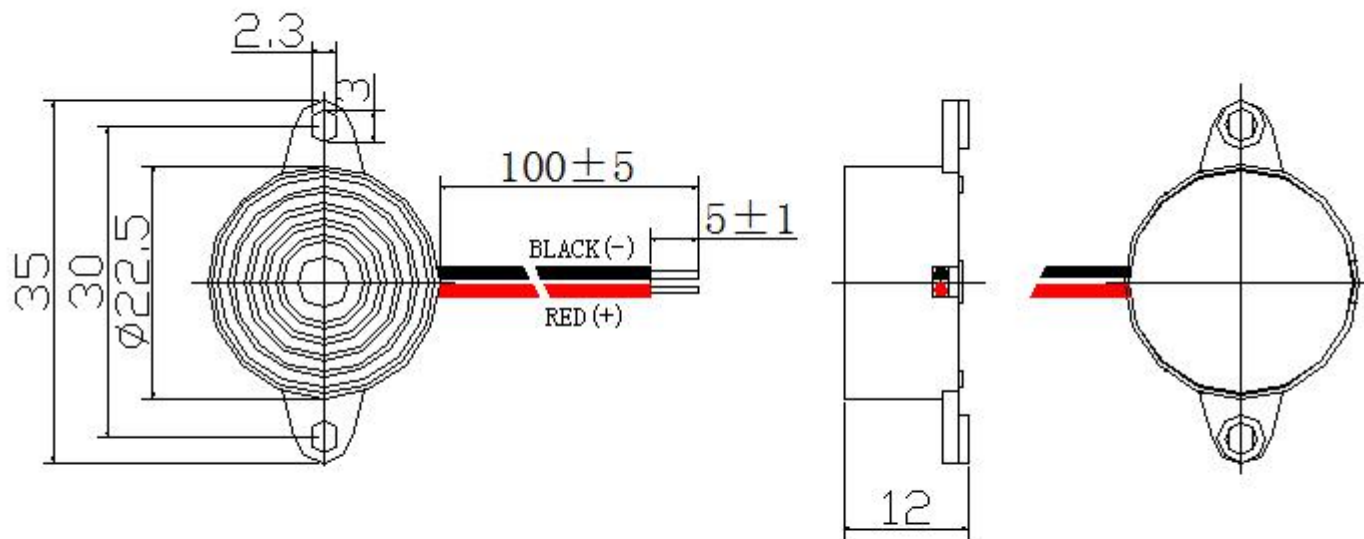
Date: 2021.05.22

DRAWING BY	CHECKED BY	APPROVED BY
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1.SPECIFICATION

TYPE (UNIT)	MSPS23B33W100V12
Min. Sound Output at 10cm (dB)	95
Rated Voltage VDC	12
Operating Voltage VDC	1.5~24
Resonant Frequency (Hz)	3300+/-500
Max. Current Consumption (mA)	12
Tone Nature	Continuous
Operating Temperature (C)	-20~+60
Storage Temperature (C)	-30~+70
Weight (g)	4

2.APPEARANCE DRAWING



PCB material:Epoxy Board

Housing material:ABS

(UNIT:MM)

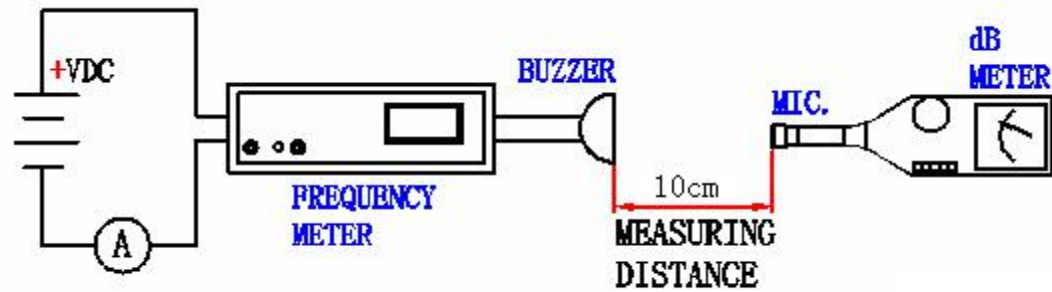
3.TESTING METHOD

Standard Measurement conditions

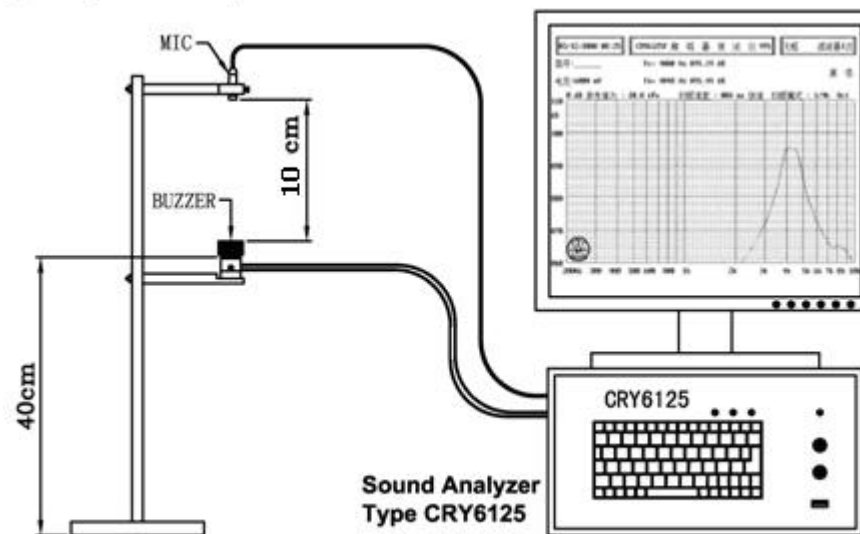
Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-65%

Acoustic Characteristics:

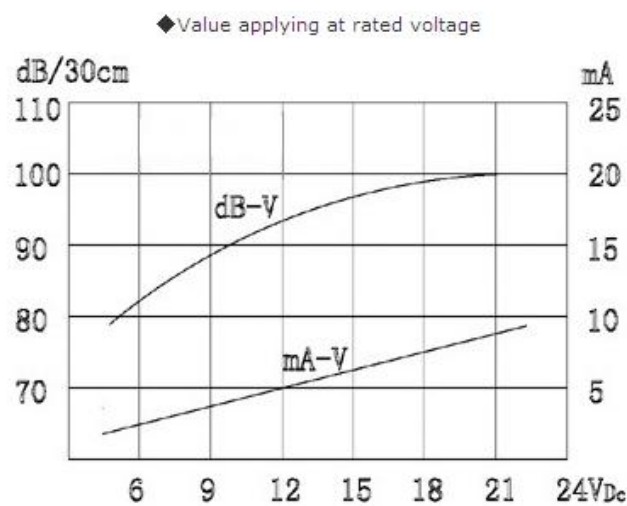
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



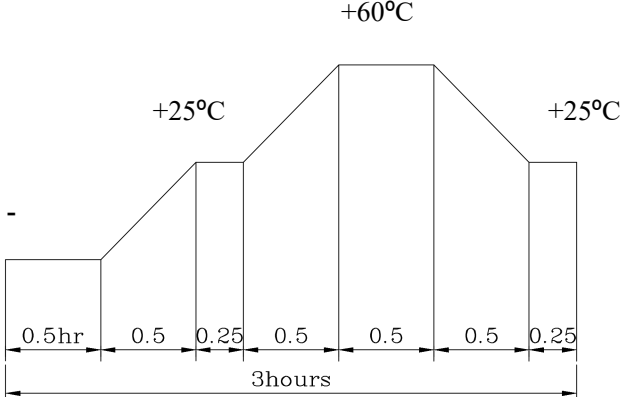
4.FREQUENCY CURVE



5.RELIABILITY TEST



MANORSHI ELECTRONICS CO.,LTD

NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with 70 °C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: +/-10dB.
2	Low Temperature Test (Storage)	After being Placed in a chamber with -30 °C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: +/-10dB.
3	Humidity Test	After being Placed in a chamber with 90-95% R.H. at 40 °C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: +/-10dB.
4	Temperature Cycle Test	The part shall be subjected to 5 cycles. One cycle shall be consist of:  Allowable variation of SPL after test: +/-10dB.
5	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,3 times, at the height of 75cm . Allowable variation of SPL after test: +/-10dB.
6	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: +/-10dB.
7	Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300 °C for 3 1 seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals).
8	Terminal Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

TEST CONDITION.

Standard Test Condition : a) Temperature : +5 ~ +35°C b) Humidity : 45-85% c) Pressure : 860-1060mbar
 一般测试条件 : a) 温度 : +5 ~ +35°C b) 湿度 : 45-85% c) 气压 : 860-1060mbar
 Judgment Test Condition : a) Temperature : +25 ± 2°C b) Humidity : 60-70% c) Pressure : 860-1060mbar
 争议时测试条件 : a) 温度 : +25 ± 2°C b) 湿度 : 60-70% c) 气压 : 860-1060mbar

6. PACKING STANDARD

