MANORSHI ELECTRONICS CO.,LTD

PRODUCT SPECIFICATION

Product Name: _____ Piezo Buzzer _____

Part Number: _____ MSPS45A29V12 _____

Document No: _____

Date: _____ 2021.05.26 _____

DRAWING BY	CHECKED BY	APPROVED BY
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MANORSHI ELECTRONICS CO.,LTD

1.SPECIFICATION

Operating Voltage	VDC	Max 18Vp-p
Rated Voltage	VDC	12
Rated Current(max)	mA	35mA （Max）at Rated Voltage
Sound output	dB	Min 100dB（Typ.）at 30CM 12Vp-p, 2.9±0.5khz
Rate Frequency	Hz	2900±500
Operating temperature	℃	-20~+60
Storage Temperature	℃	-30~+80
Housing material		ABS

2.APPEARANCE DRAWING
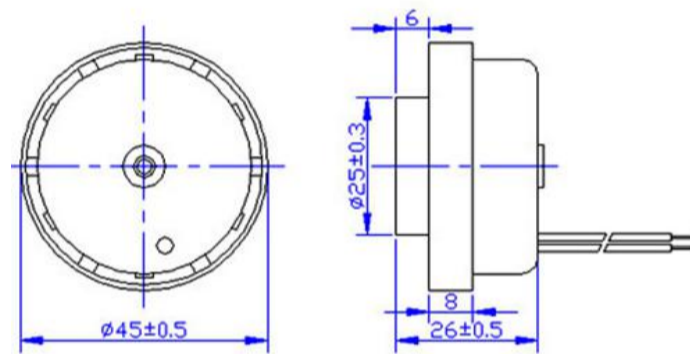
(UNIT:MM)

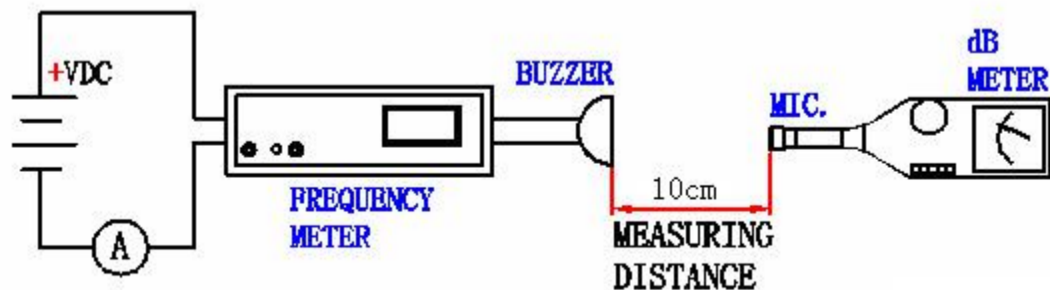## 3.TESTING METHOD

Standard Measurement conditions
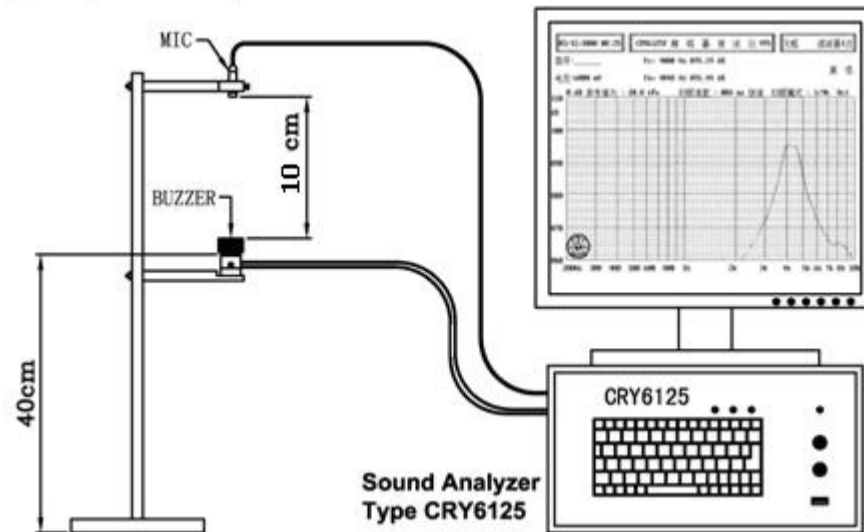
Temperature:25±2℃　Humidity:45-65%

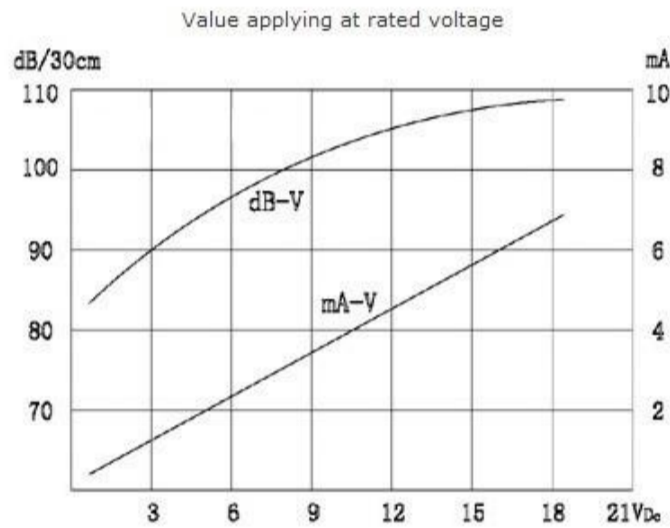### Acoustic Characteristics:

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

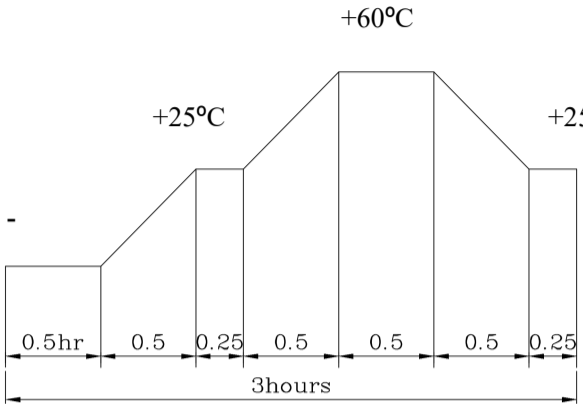**In the measuring test, buzzer is placed as follows:**

Sound Analyzer
Type CRY6125

4.FREQUENCY CURVE

Value applying at rated voltage

5.RELIABILITY TEST

NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with 70 2ºC 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 2ºC 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 2ºC 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 5ºC 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℃ b) Humidity : 45-85% c) Pressure : 860-1060mbar

　一般测试条件 : a) 温度 : +5 ～ +35℃ b) 湿度 : 45-85% c) 气压 : 860-1060mbar

Judgment Test Condition : a) Temperature : +25 ± 2℃ b) Humidity : 60-70% c) Pressure : 860-1060mbar

　争议时测试条件 : a) 温度 : +25 ± 2℃ b) 湿度 : 60-70% c) 气压 : 860-1060mbar

6. PACKING STANDARD

50PCS/塑料袋

350mm

250mm

50PCS/盒

400PCS/箱
（8盒）

250mm

410mm

500mm
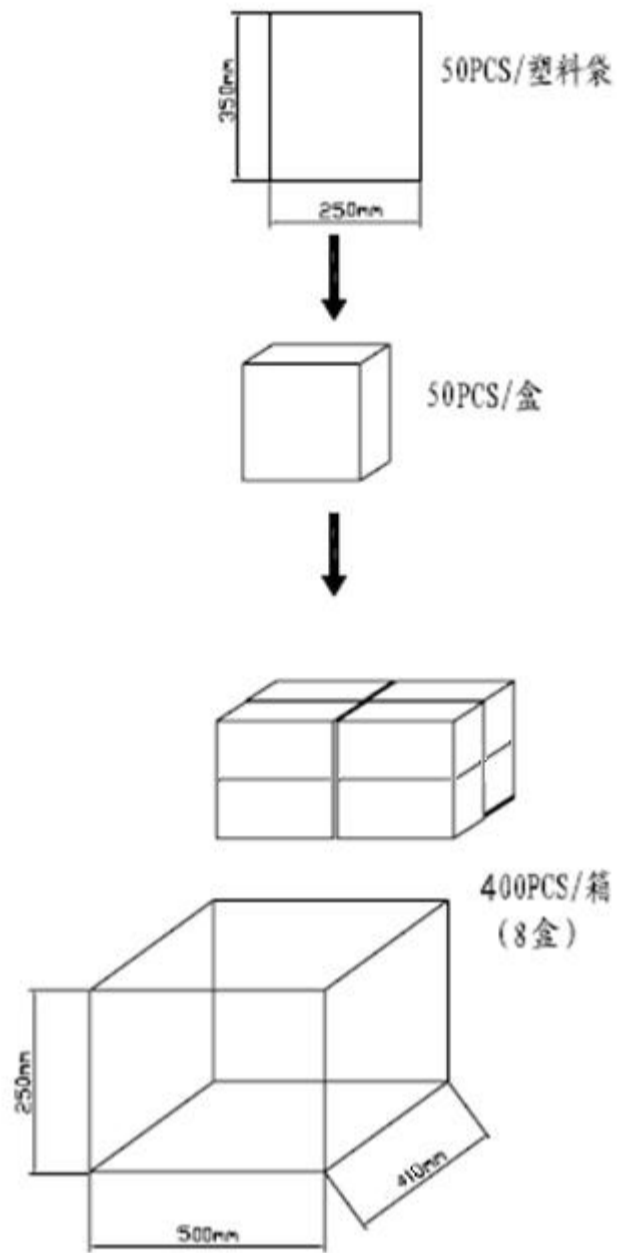
Remark:
50pcs per bag
1 trays for unit，8units per carton
Total:400 pcs per box
Size:50*41*25cm