

**MODEL:** CMS-181637-158SP-X8 | **DESCRIPTION:** SPEAKER**FEATURES**

- IPX8 rated
- rated 1.5 W
- 8  $\Omega$

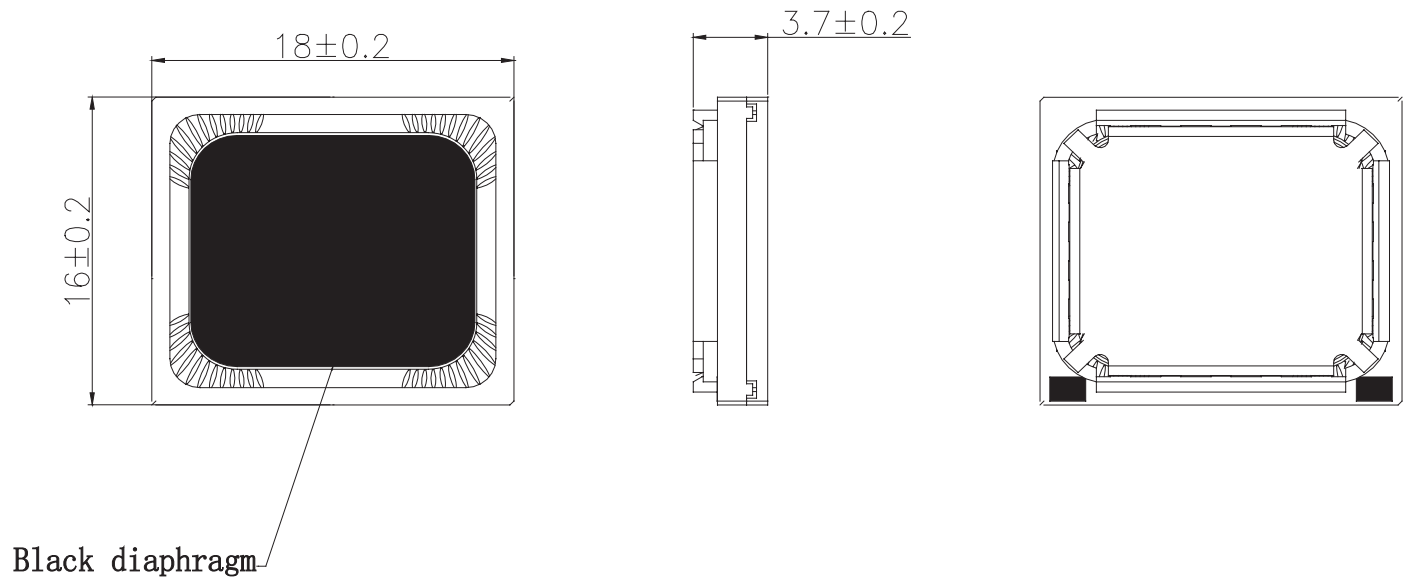
**SPECIFICATIONS**

| parameter               | conditions/description                                    | min  | typ   | max    | units              |
|-------------------------|-----------------------------------------------------------|------|-------|--------|--------------------|
| input power             | max power: as per IEC-268-5, in 1 cc box                  |      | 1.5   | 1.7    | W                  |
| impedance               | at 2.0 kHz, 3.46 Vrms                                     | 6.8  | 8     | 9.2    | $\Omega$           |
| coil resistance         |                                                           | 6.48 | 7.2   | 7.92   | $\Omega$           |
| resonant frequency [Fo] | at 3.46 Vrms, 10 cm in 1 cc box                           | 880  | 1,100 | 1,320  | Hz                 |
| frequency response      |                                                           | Fo   |       | 20,000 | Hz                 |
| sound pressure level    | at 3.46 Vrms, 10 cm, avg 1.0, 1.5, 2.0 kHz, 1 cc box      | 97   | 100   | 103    | dB                 |
| distortion              | at 2.0 kHz, 3.46 Vrms, 10 cm in 1 cc box                  |      |       | 10     | %                  |
| buzz, rattle, etc.      | must be normal at sine wave, 0.2~ 2 kHz in 1 cc box       |      |       | 3.46   | V                  |
| polarity                | cone moves forward w/ positive dc current to "+" terminal |      |       |        |                    |
| dimensions              | 18 x 16 x 3.7                                             |      |       |        | mm                 |
| magnet                  | Nd-Fe-B                                                   |      |       |        |                    |
| frame material          | PPA                                                       |      |       |        |                    |
| cone material           | PEEK                                                      |      |       |        |                    |
| terminal                | solder pads                                               |      |       |        |                    |
| weight                  |                                                           | 3.0  | 3.5   | 4.0    | g                  |
| operating temperature   |                                                           | -20  |       | 60     | $^{\circ}\text{C}$ |
| storage temperature     |                                                           | -20  |       | 70     | $^{\circ}\text{C}$ |
| hand soldering          | for maximum 3 seconds                                     |      |       | 380    | $^{\circ}\text{C}$ |
| RoHS                    | yes                                                       |      |       |        |                    |
| IP level                | IPX8 (front side)                                         |      |       |        |                    |

Notes: 1. All specifications measured at 15~35 $^{\circ}\text{C}$ , humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

## MECHANICAL DRAWING

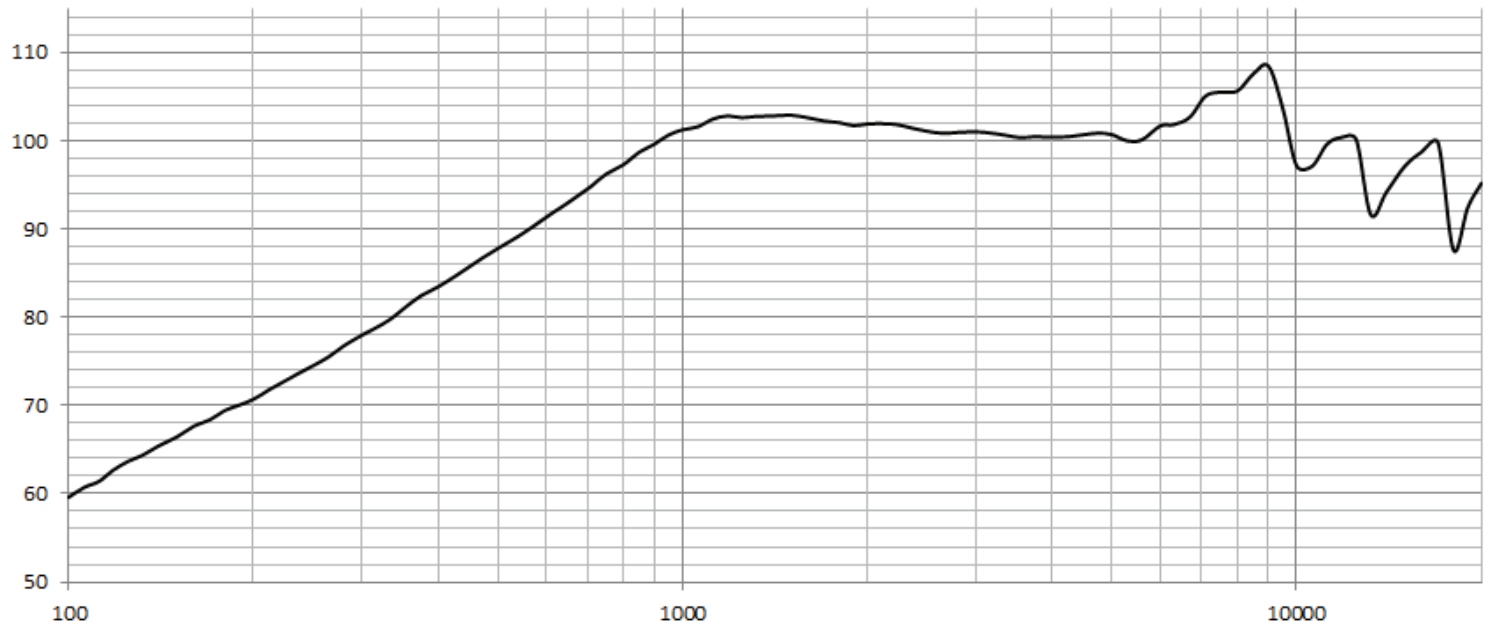
units: mm  
tolerance:  $\pm 0.2$  mm



## RESPONSE CURVES

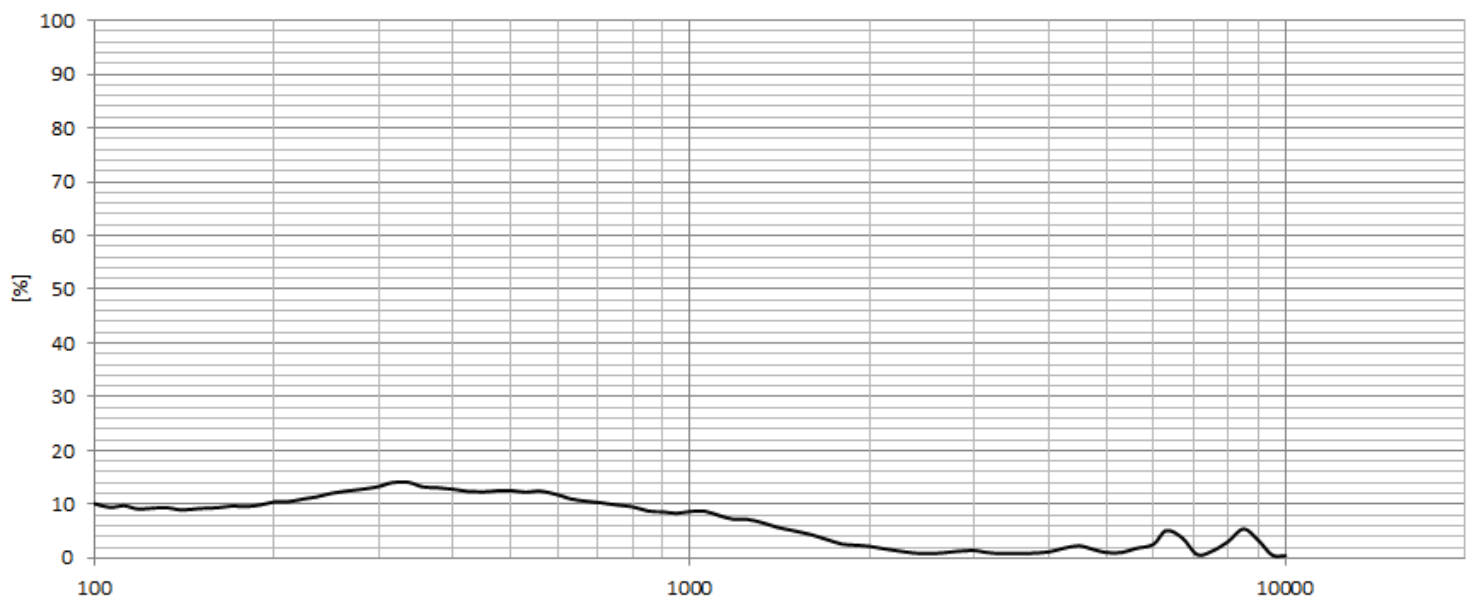
### Frequency Response Curve

Test Conditions: 3.46 Vrms / 10 cm in 1 cc box



### Total Harmonic Distortion Curve

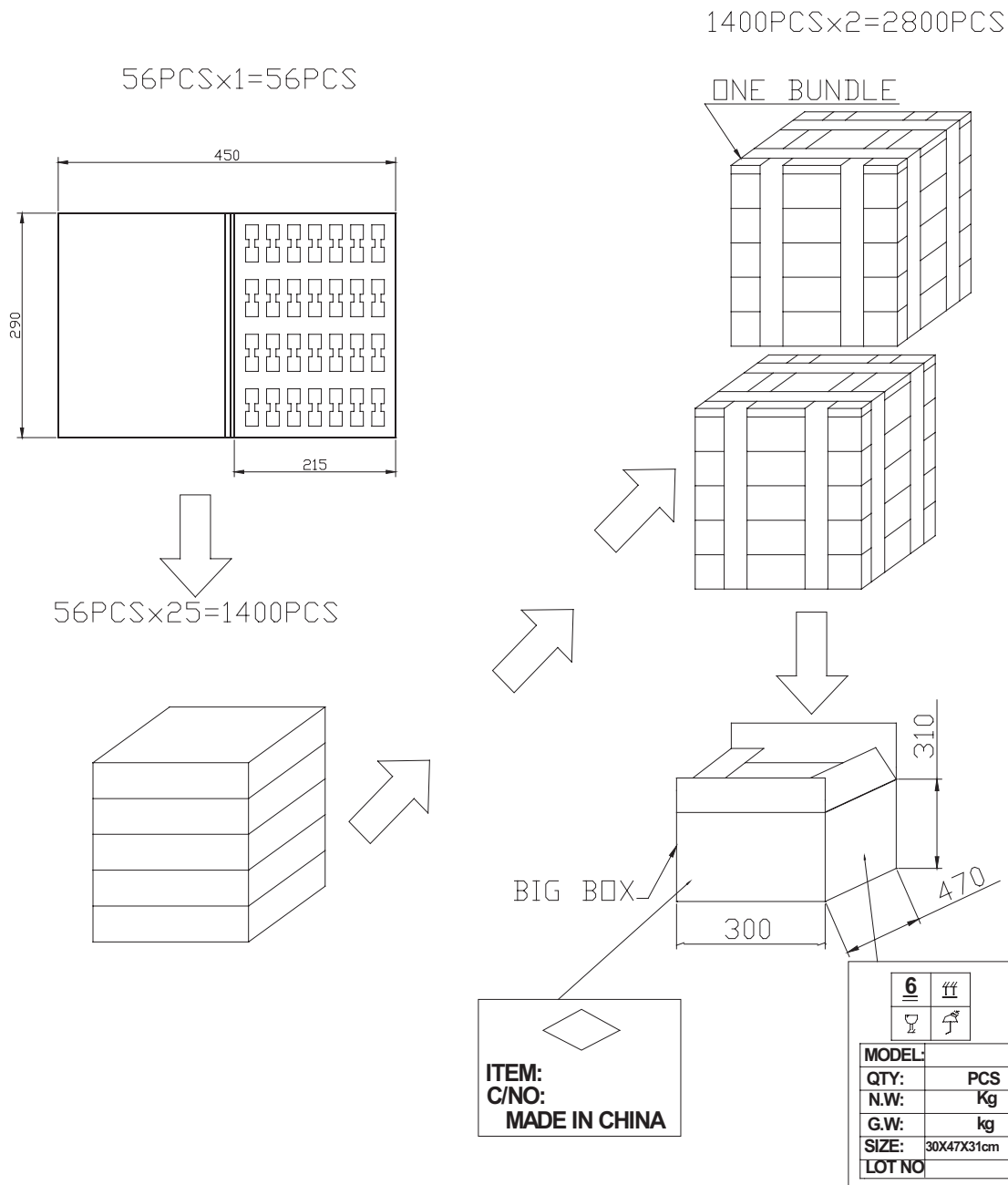
Test Conditions: 3.46 Vrms / 10 cm in 1 cc box



## PACKAGING

units: mm

Tray QTY: 56 pcs per tray  
Carton Size: 470 x 300 x 310 mm  
Carton QTY: 2,800 pcs per carton



## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 03/22/2023 |

The revision history provided is for informational purposes only and is believed to be accurate.



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