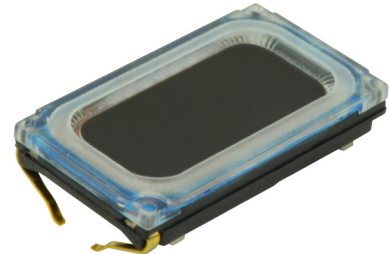


**SERIES:** CMS-16093-076X-67 | **DESCRIPTION:** SPEAKER**FEATURES**

- IP67 rated face
- protection against dust and water ingress
- micro-speaker
- 3 mm height
- 5 available termination options

**SPECIFICATIONS**

| parameter               | conditions/description                                    | min  | typ | max    | units              |
|-------------------------|---|------|-----|--------|--------------------|
| input power             | max power: as per IEC-268-1, in 1 cc box                  |      | 0.7 | 1.0    | W                  |
| impedance               | at 2.0 kHz, 2.05 Vrms, in 1 cc box                        | 5.1  | 6   | 6.9    | $\Omega$           |
| coil resistance         |   | 4.59 | 5.4 | 6.21   | $\Omega$           |
| resonant frequency (Fo) | at 1.0 Vrms in free air, 10 cm                            | 480  | 600 | 720    | Hz                 |
|                         | at 2.05 Vrms W in 1 cc box, 10 cm                         | 720  | 900 | 1,080  | Hz                 |
| frequency response      |   | 100  |     | 20,000 | Hz                 |
| sound pressure level    | at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box     | 87   | 90  | 93     | dB                 |
| distortion              | at 800~1,200 Hz, 2.05 Vrms, 10 cm                         |      |     | 15     | %                  |
|                         | at 1,201~5,000 Hz, 2.05 Vrms, 10 cm                       |      |     | 10     | %                  |
| buzz, rattle, etc.      | must be normal at sine wave, 0.2~2 kHz, 1 cc box          |      |     | 2.05   | Vrms               |
| polarity                | cone moves forward w/ positive dc current to "+" terminal |      |     |        |                    |
| dimensions              | 16 x 9 x 3  |      |     |        | mm                 |
| magnet                  | Nd-Fe-B   |      |     |        |                    |
| cone material           | mylar   |      |     |        |                    |
| weight                  |   |      | 1.3 |        | g                  |
| operating temperature   |   | -20  |     | 70     | $^{\circ}\text{C}$ |
| storage temperature     |   | -40  |     | 85     | $^{\circ}\text{C}$ |
| hand soldering          | for maximum 3 seconds (N/A for spring contacts)           |      |     | 380    | $^{\circ}\text{C}$ |
| RoHS                    | yes   |      |     |        |                    |
| IP level                | IP67 (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.

**PART NUMBER KEY****CMS-16093-076 XX - 67**

Base Number

Termination Options:

S = spring contacts

SP = solder pads

L100 = wire leads, no connector

L100A = wire leads with Molex housing 51021-0200

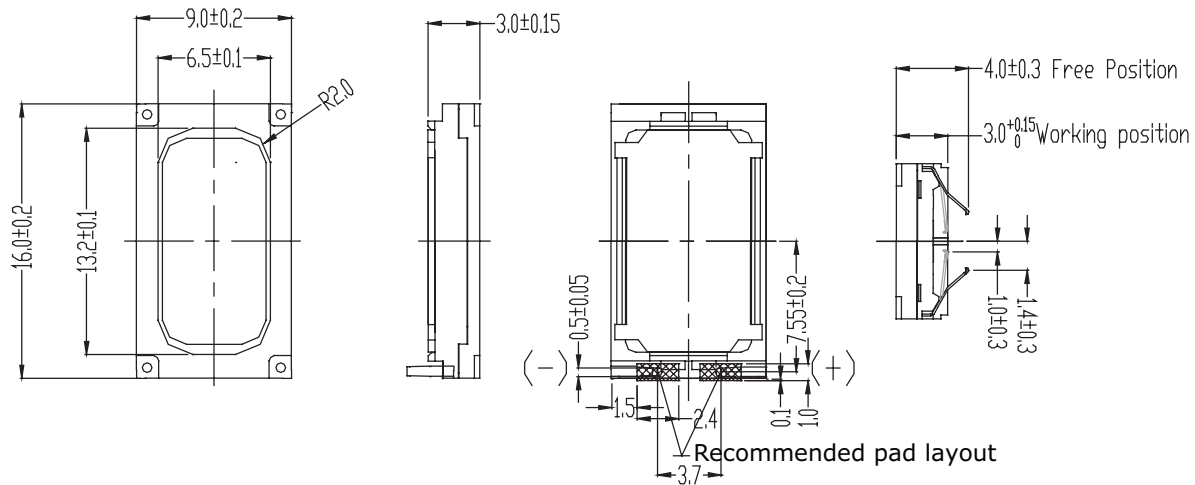
L100B = wire leads with JST housing SHR-02V-S-B

## MECHANICAL DRAWINGS

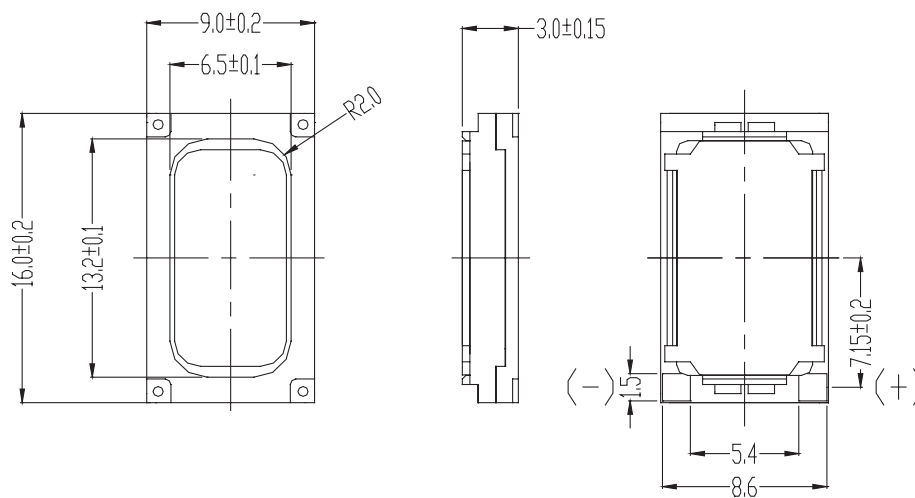
units: mm

tolerance:  $\pm 0.2$  mm

### SPRING CONTACTS



### SOLDER PADS

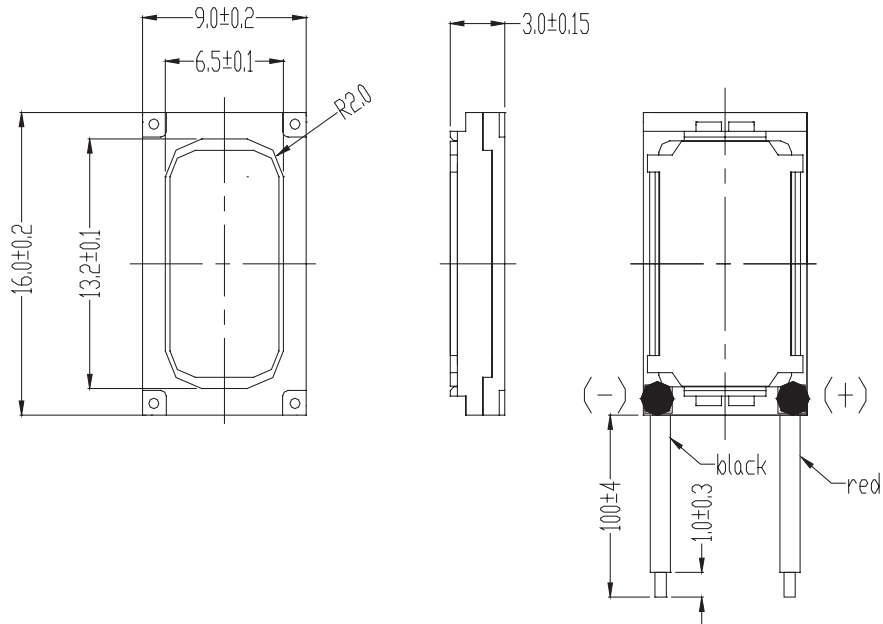


## MECHANICAL DRAWINGS (CONTINUED)

units: mm  
tolerance:  $\pm 0.2$  mm

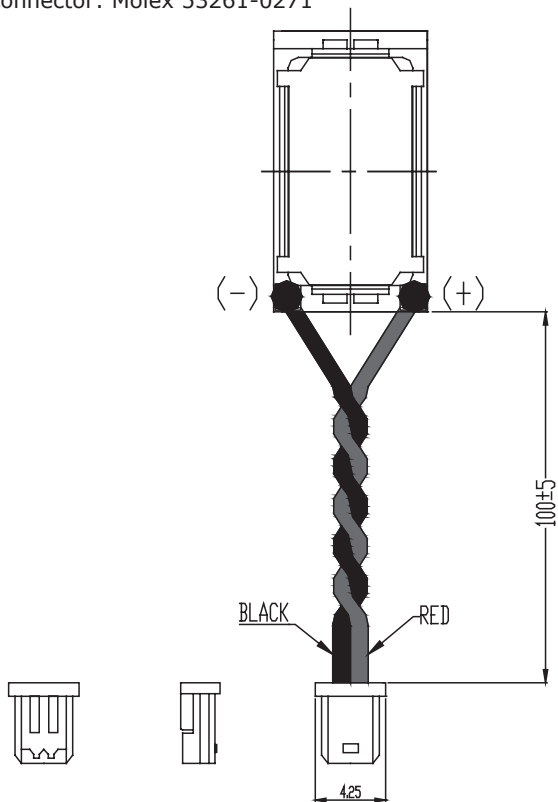
### WIRE LEADS, NO CONNECTOR

wire: UL 1571 32 AWG



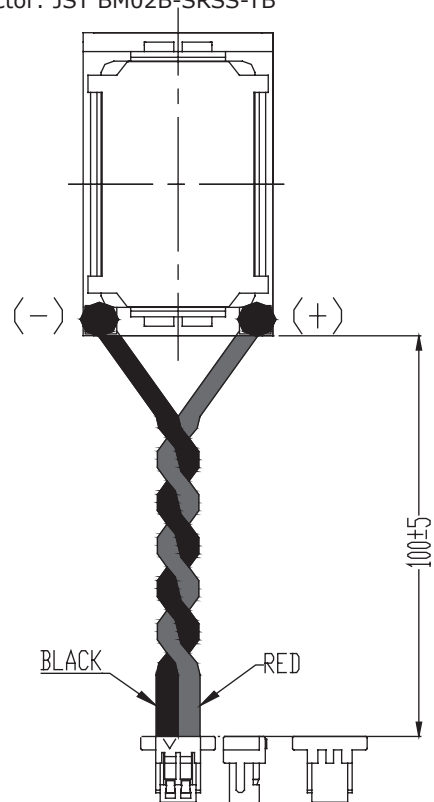
### WIRE LEADS WITH MOLEX CONNECTOR

wire: UL 1571 30 AWG  
connector: Molex 51021-0200  
mating connector: Molex 53261-0271



### WIRE LEADS WITH JST CONNECTOR

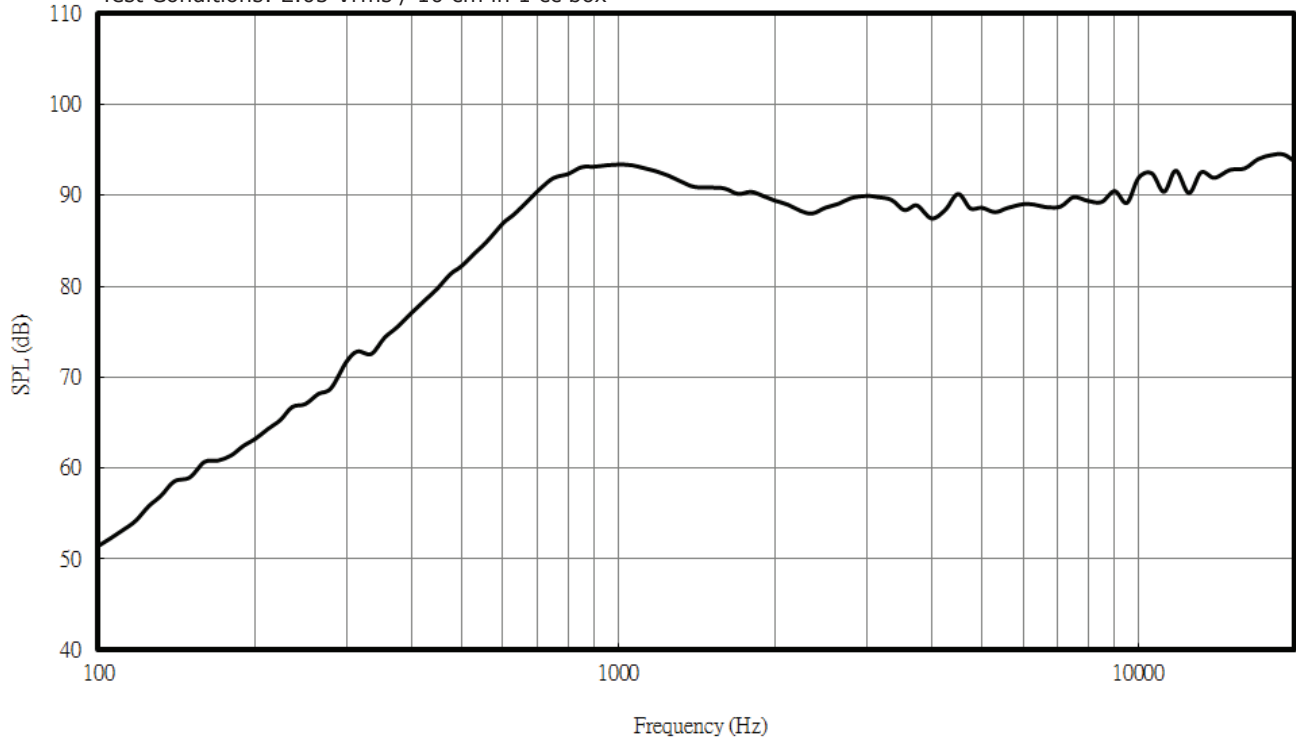
wire: UL 1571 30 AWG  
connector: JST SHR-02V-S-B  
mating connector: JST BM02B-SRSS-TB



## RESPONSE CURVES

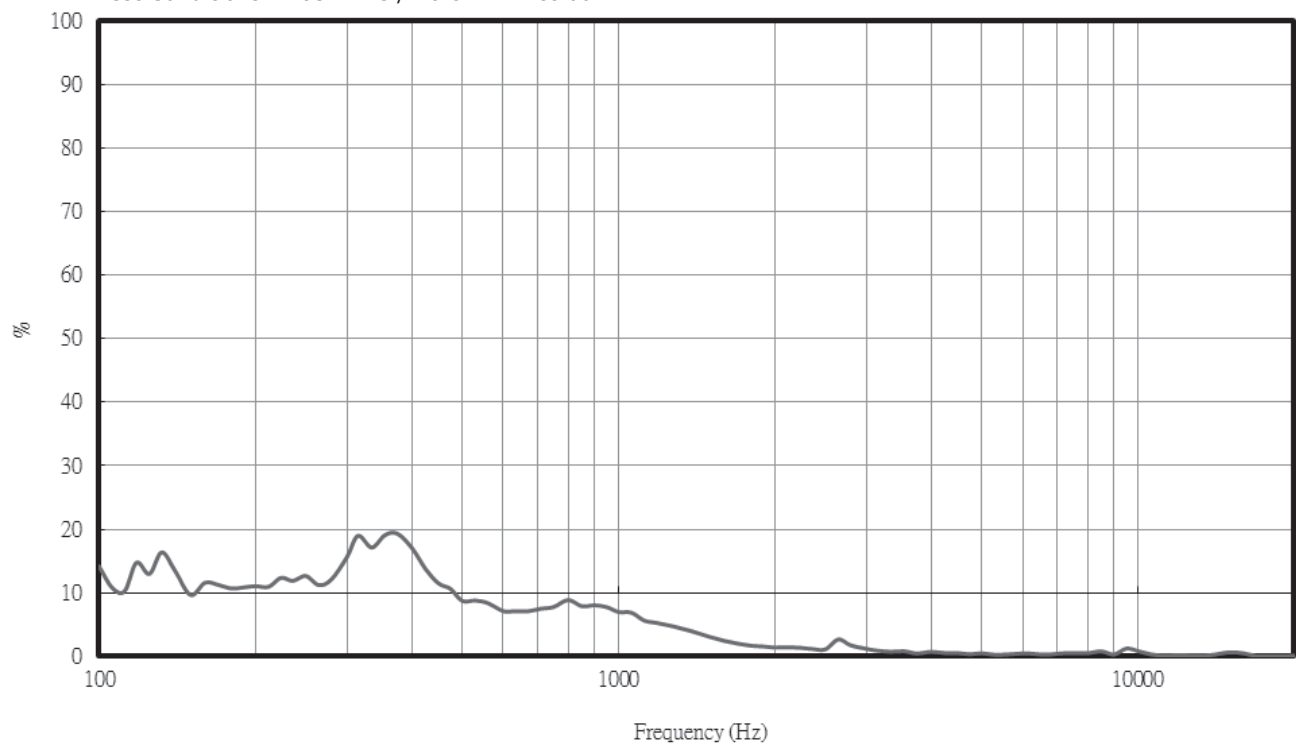
### Frequency Response Curve

Test Conditions: 2.05 Vrms / 10 cm in 1 cc box



### Total Harmonic Distortion Curve

Test Conditions: 2.05 Vrms / 10 cm in 1 cc box



## PACKAGING

units: mm

Tray Size: 290 x 215 mm  
 Tray QTY: 100 pcs per tray  
 Carton Size: 470 x 300 x 310 mm  
 Carton QTY: 5,000 pcs per carton

