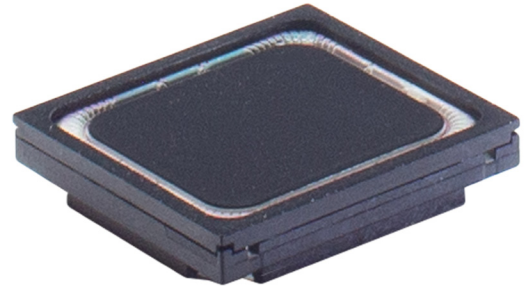


**SERIES:** CMS-18163-24X | **DESCRIPTION:** SPEAKER**FEATURES**

- high sound pressure level
- 4 ohm impedance
- multiple termination options

**SPECIFICATIONS**

| parameter               | conditions/description                                       | min  | typ   | max    | units    |
|-------------------------|--------------------------------------------------------------|------|-------|--------|----------|
| input power             | max power: 1 min on, 2 min off, 10 cycles in 1 cc box        |      | 2.0   | 2.2    | W        |
| impedance               | at 2.0 kHz, 2.83 Vrms                                        | 3.2  | 4.0   | 4.8    | $\Omega$ |
| coil resistance         |                                                              | 2.88 | 3.60  | 4.32   | $\Omega$ |
| resonant frequency [Fo] | at 2.83 Vrms, 10 cm in 1 cc box                              | 800  | 1,000 | 1,200  | Hz       |
| frequency response      |                                                              | Fo   |       | 20,000 | Hz       |
| sound pressure level    | at 2.0 W, 10 cm, avg at 1.0, 1.5, 2.0 kHz in 1 cc box        | 101  | 104   | 107    | dB       |
| distortion              | at 2.0 kHz, 2.83 Vrms, 10 cm                                 |      |       | 10     | %        |
| buzz, rattle, etc.      | must be normal at sine wave, between 0.2~2.0 kHz in 1 cc box |      |       | 2.83   | 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                                                         |      |       |        |          |
| weight                  | spring contacts and solder pads models                       | 2.85 | 3.35  | 3.85   | g        |
|                         | wire leads model                                             | 3.10 | 3.60  | 4.10   | g        |
| operating temperature   |                                                              | -20  |       | 60     | °C       |
| storage temperature     |                                                              | -20  |       | 70     | °C       |
| hand soldering          | for 3~5 seconds                                              | 370  | 380   | 390    | °C       |
| RoHS                    | yes                                                          |      |       |        |          |

Notes: 1. All specifications measured at 15~35°C, humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

**PART NUMBER KEY****CMS - 18163 - 24 XX**

Base Number

Termination Options:

S = spring contacts

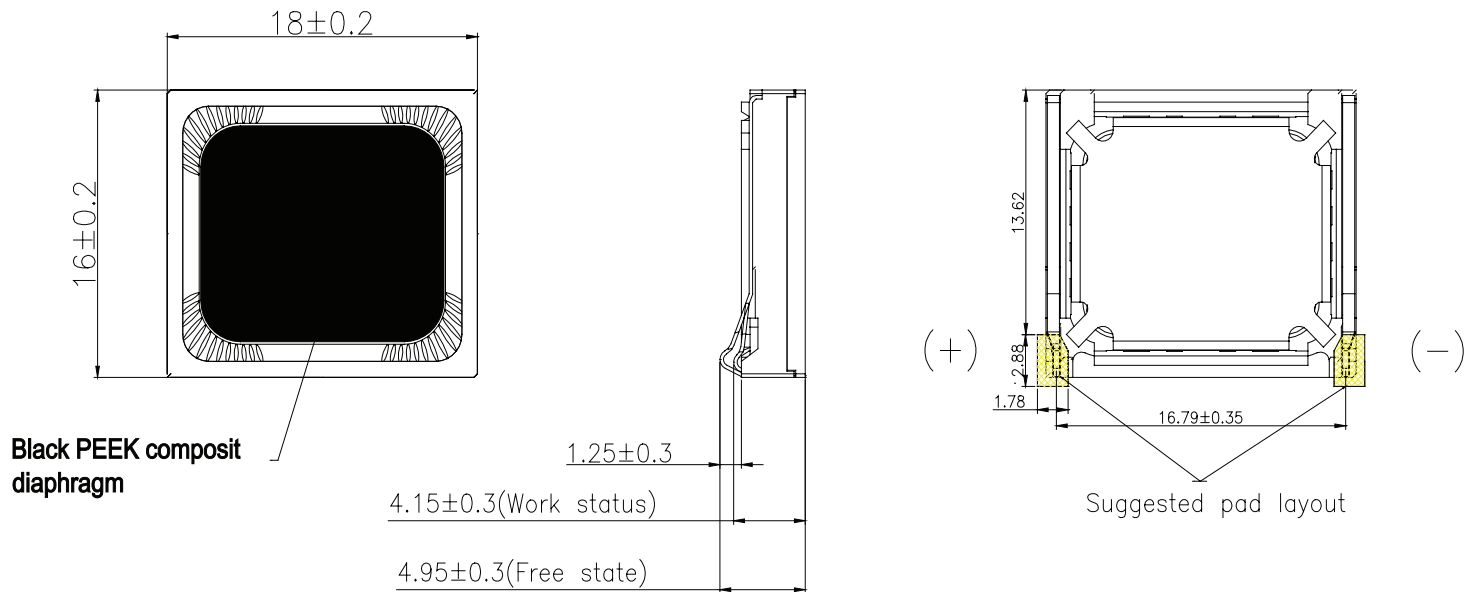
SP = solder pads

L200 = wire leads

## MECHANICAL DRAWING (SPRING CONTACTS)

units: mm  
tolerance:  $\pm 0.2$  mm

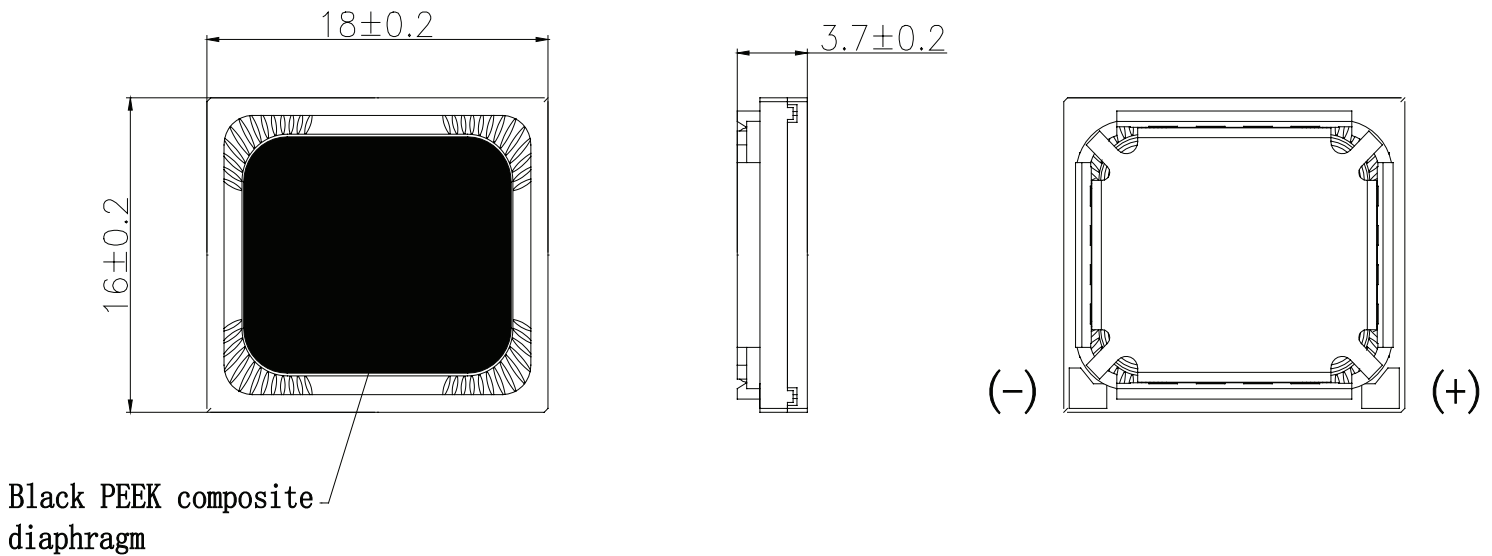
used in enclosed speaker CES-28266-24-L200



## MECHANICAL DRAWING (SOLDER PADS)

units: mm  
tolerance:  $\pm 0.2$  mm

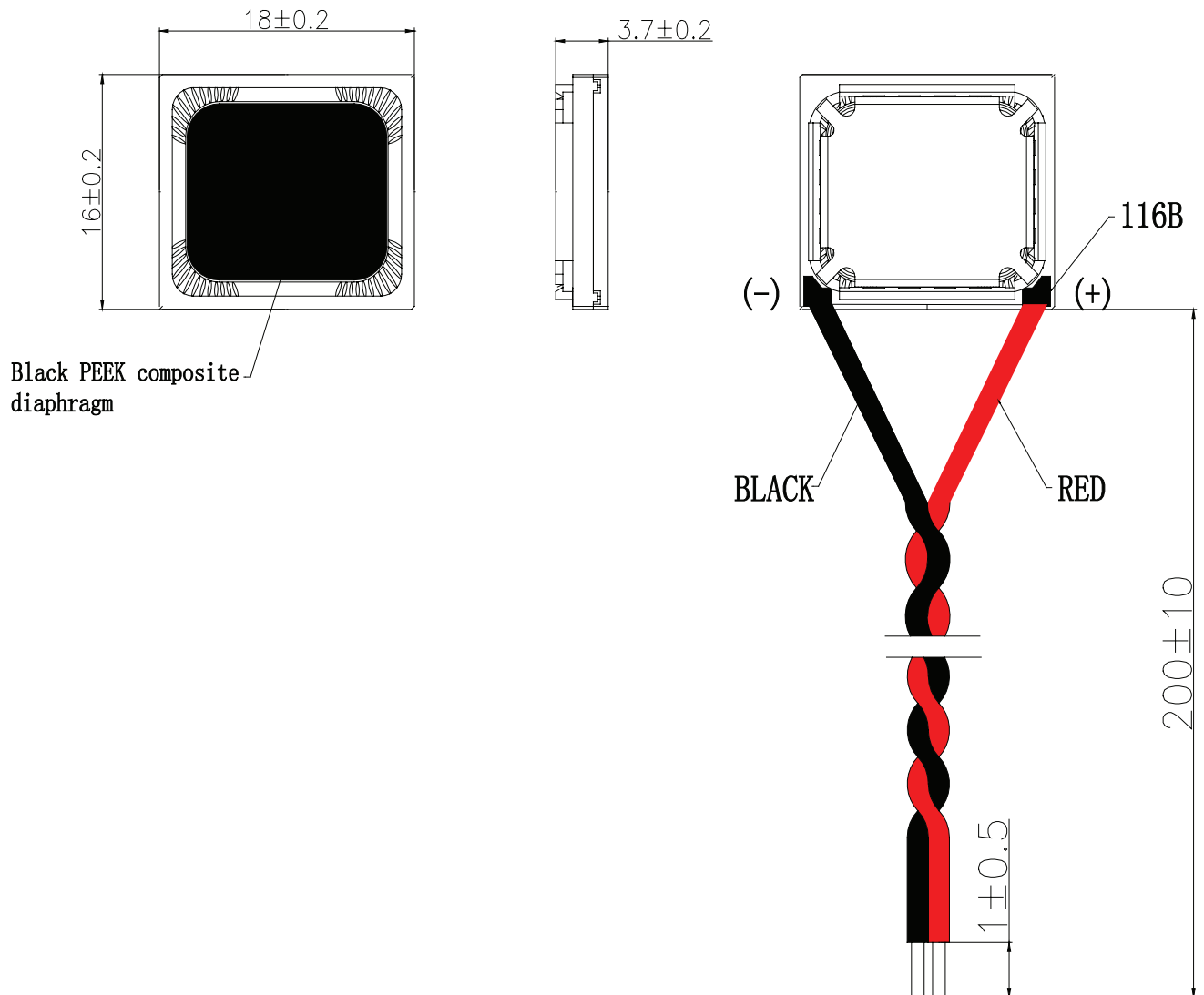
used in enclosed speaker CES-28266-24-L200



## MECHANICAL DRAWING (WIRE LEADS)

units: mm  
tolerance:  $\pm 0.2$  mm

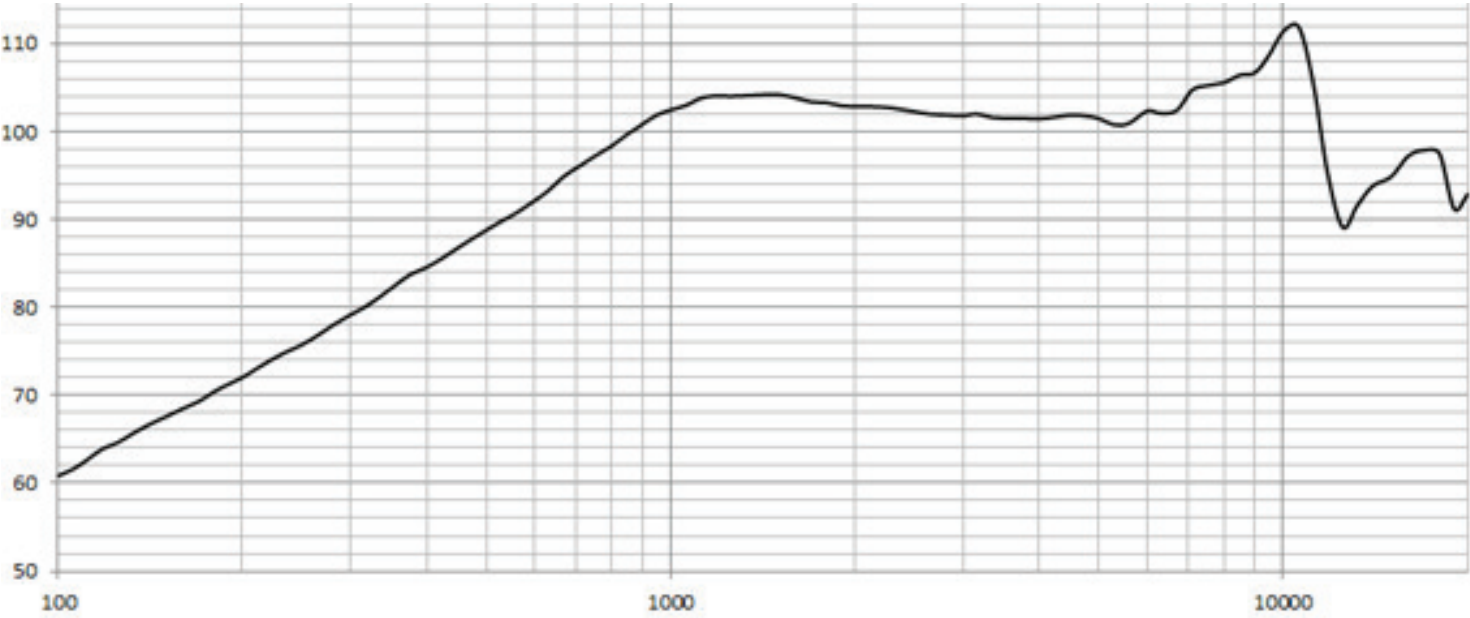
wire: UL1571 30 AWG  
used in enclosed speaker CES-28266-24-L200



RESPONSE CURVES

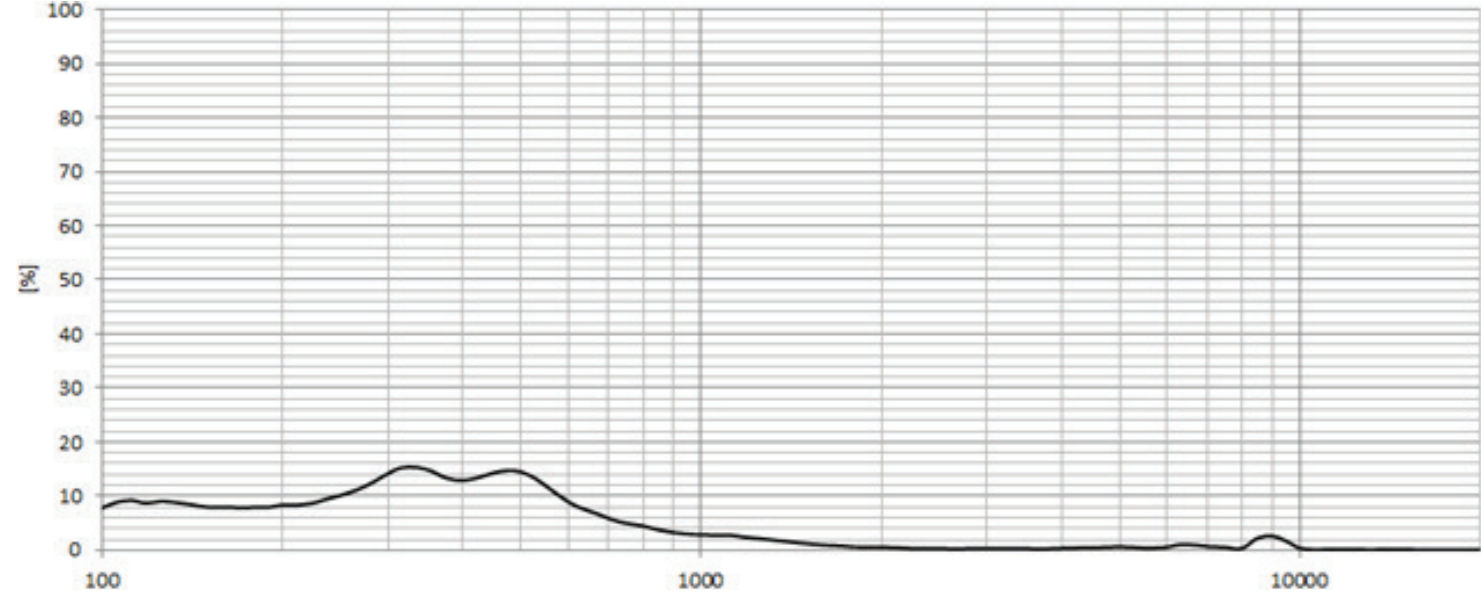
Frequency Response Curve

Test Conditions: 2.83 Vrms / 10 cm in 1 cc box



Total Harmonic Distortion Curve

Test Conditions: 2.83 Vrms / 10 cm in 1 cc box



THIELE-SMALL PARAMETERS

| parameter                    | conditions/description | typ    |
|------------------------------|------------------------|--------|
| Mechanical Q Factor          | Qms                    | 1.348  |
| Electrical Q Factor          | Qes                    | 2.69   |
| Total Q Factor               | Qts                    | 0.898  |
| Compliance Equivalent Volume | Vas                    | 0.0043 |

Notes: 2. Results represent typical performance in Free Air conditions.

REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 12/01/2025 |

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



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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