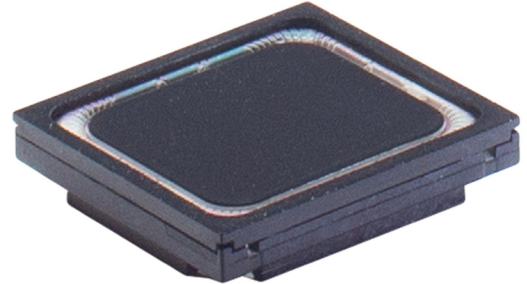


**SERIES:** CMS-18163-24X | **DESCRIPTION:** SPEAKER**FEATURES**

- 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

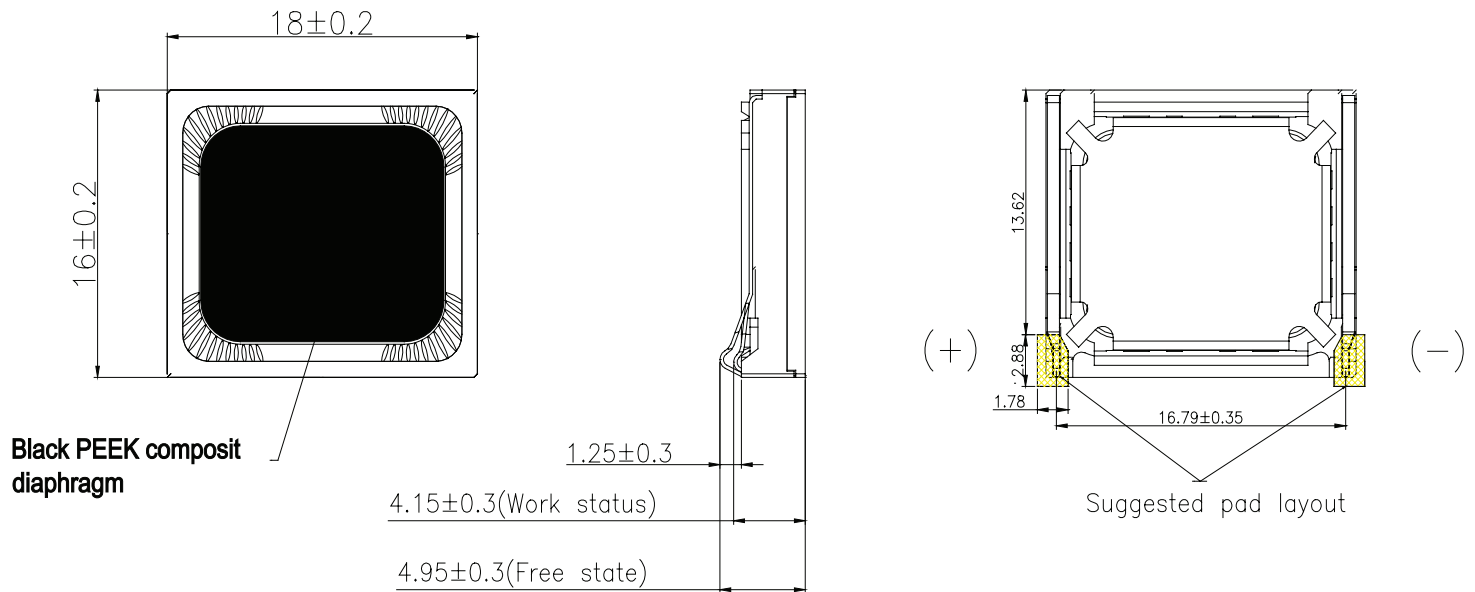
SP = solder pads

L200 = wire leads

## MECHANICAL DRAWING (SPRING CONTACTS)

units: mm  
tolerance:  $\pm 0.2$  mm

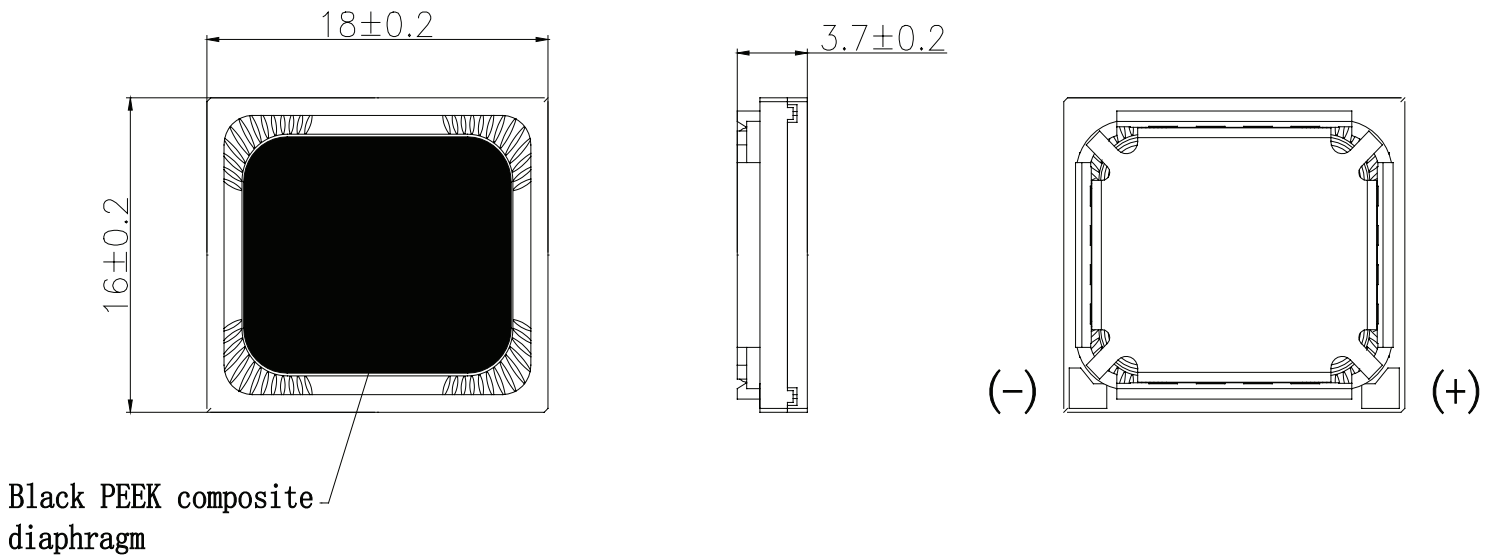
used in enclosed speaker CES-28266-24-L200



## MECHANICAL DRAWING (SOLDER PADS)

units: mm  
tolerance:  $\pm 0.2$  mm

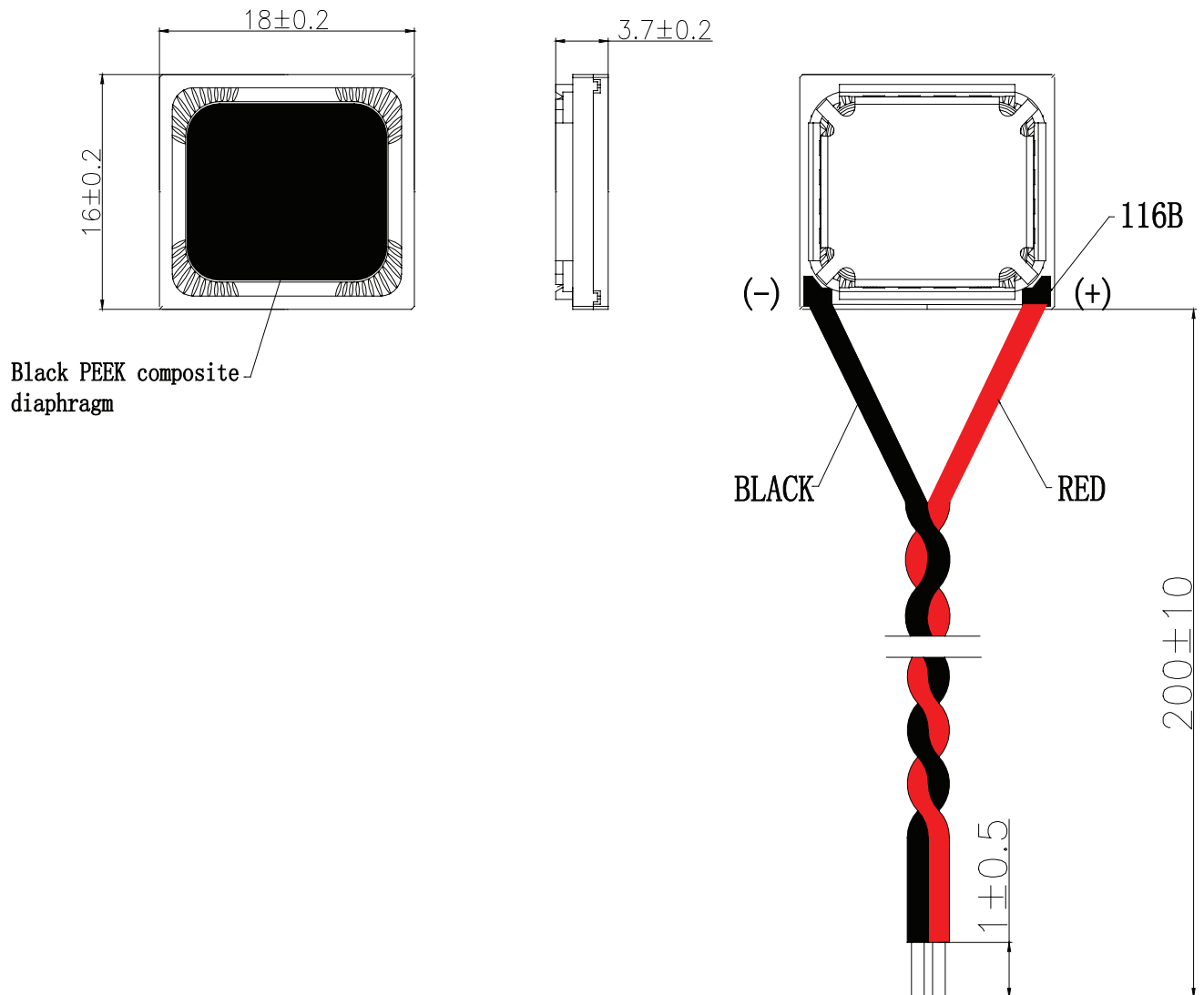
used in enclosed speaker CES-28266-24-L200



## MECHANICAL DRAWING (WIRE LEADS)

units: mm  
tolerance:  $\pm 0.2$  mm

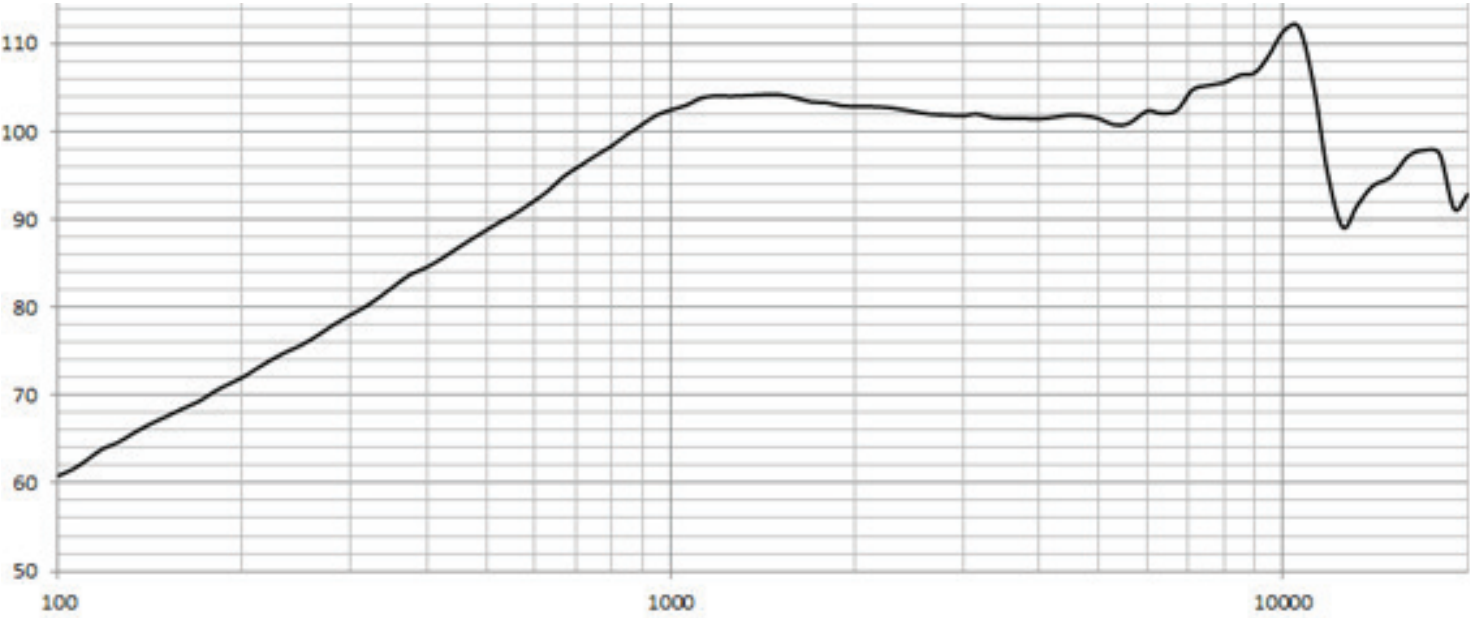
wire: UL1571 30 AWG  
used in enclosed speaker CES-28266-24-L200



RESPONSE CURVES

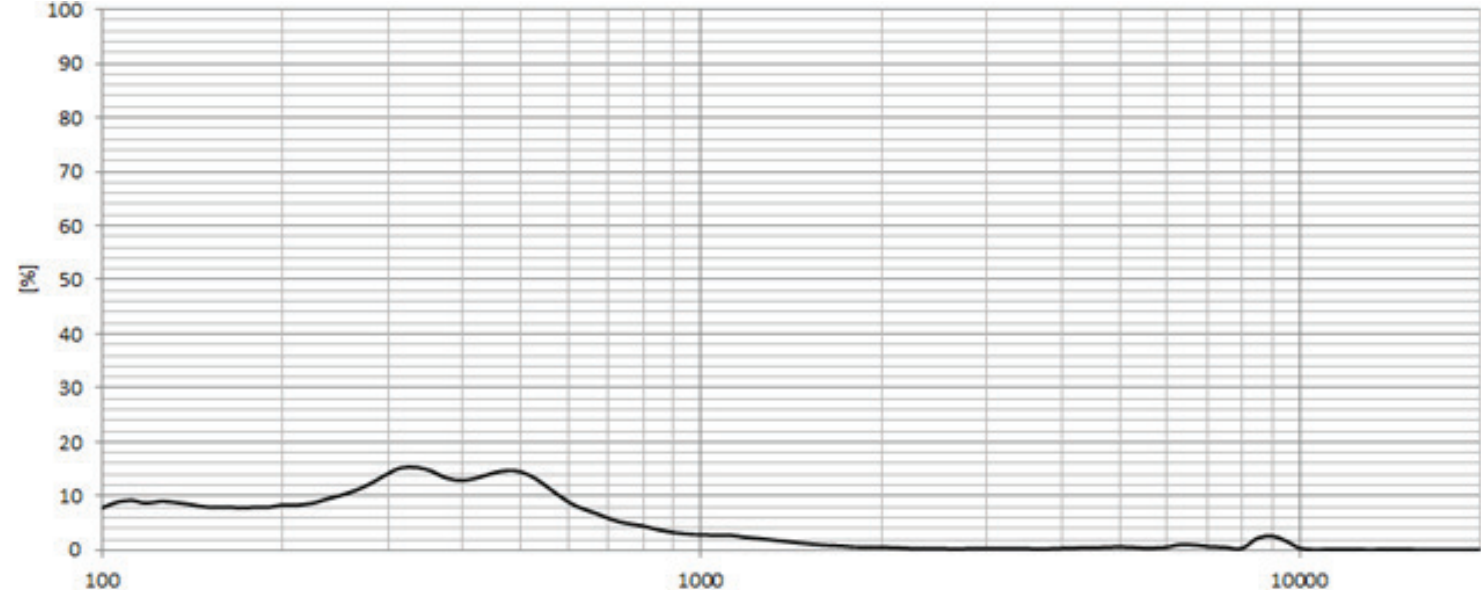
Frequency Response Curve

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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Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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