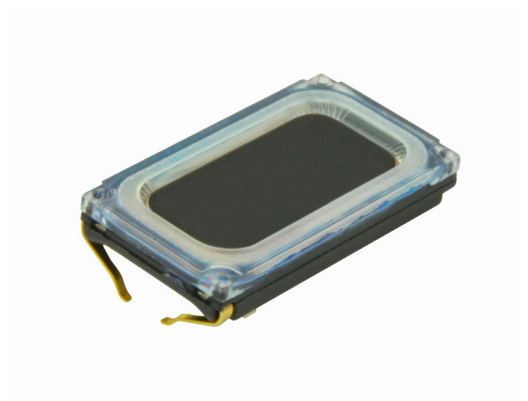


**SERIES:** CMS-16093-078X-67 | **DESCRIPTION:** SPEAKER**FEATURES**

- IPX7 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, 2.37 Vrms, in 1 cc box	6.8	8	9.2	Ω
coil resistance		6.48	7.2	7.92	Ω
resonant frequency (Fo)	at 1.0 Vrms in free air, 10 cm	440	550	660	Hz
	at 2.37 Vrms in 1 cc box, 10 cm	680	850	1,020	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	88	91	94	dB
distortion	at 800~1,200 Hz, 2.37 Vrms, 10 cm			15	%
	at 1,201~5,000 Hz, 2.37 Vrms, 10 cm			10	%
buzz, rattle, etc.	must be normal at sine wave, 0.2~2 kHz, 1 cc box			2.37	Vrms
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	16 x 9 x 3				mm
magnet	Nd-Fe-B				
cone material	PEEK				
weight			1.3		g
operating temperature		-20		50	°C
storage temperature		-40		65	°C
hand soldering	for maximum 3 seconds (N/A for spring contacts)			380	°C
RoHS	yes				
IP level	IPX7 (front side)				

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-16093-078 XX - 67**

Base Number

Termination Options:

S = spring contacts

SP = solder pads

L100 = wire leads, no connector

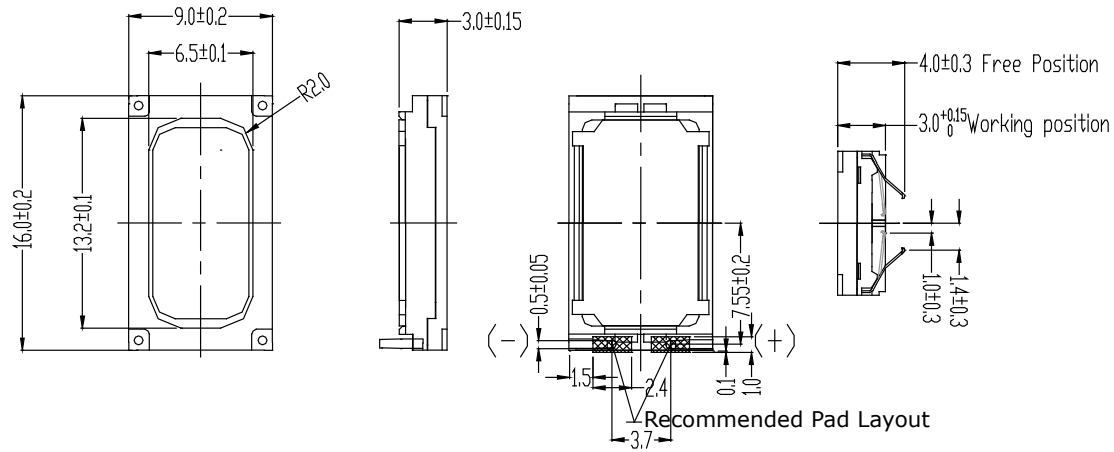
L100A = wire leads with Molex housing 51021-0200

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

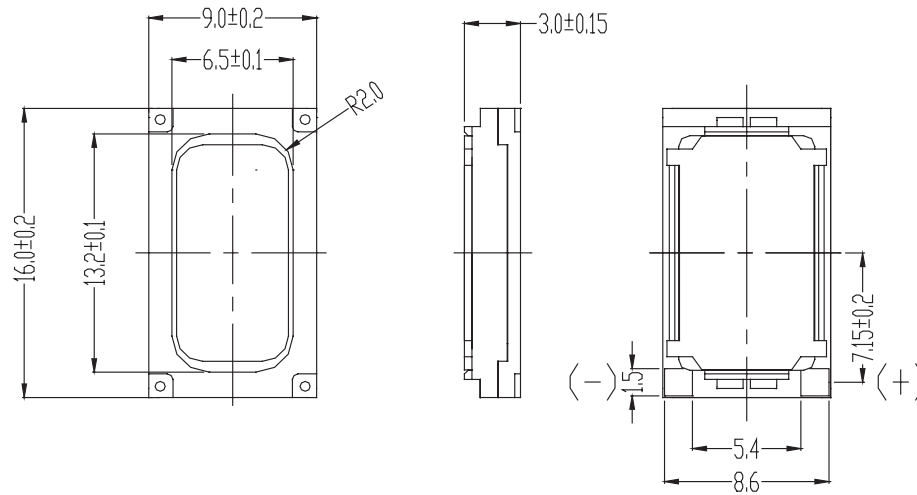
MECHANICAL DRAWINGS

units: mm
tolerance: ± 0.2 mm

SPRING CONTACTS



SOLDER PADS

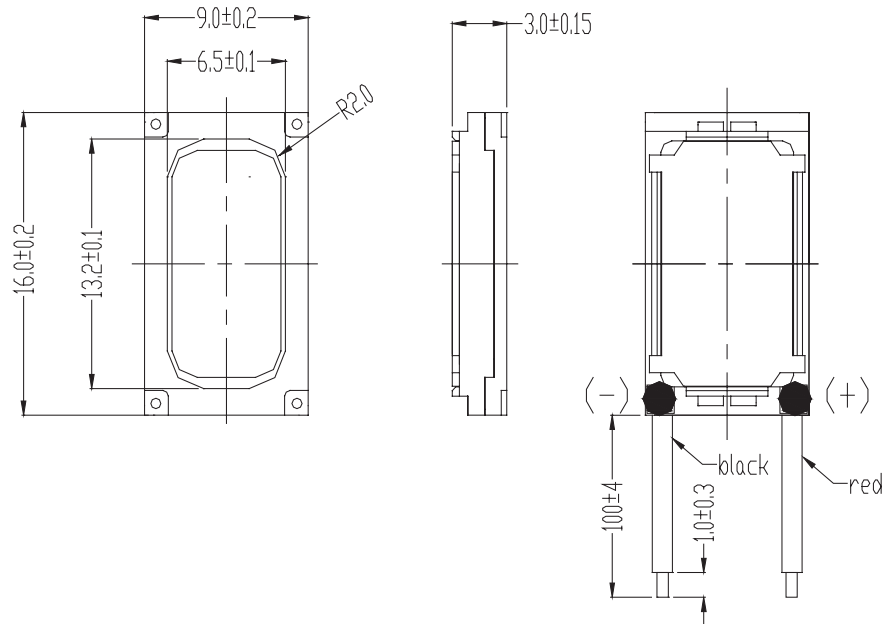


MECHANICAL DRAWINGS (CONTINUED)

units: mm
tolerance: ± 0.2 mm

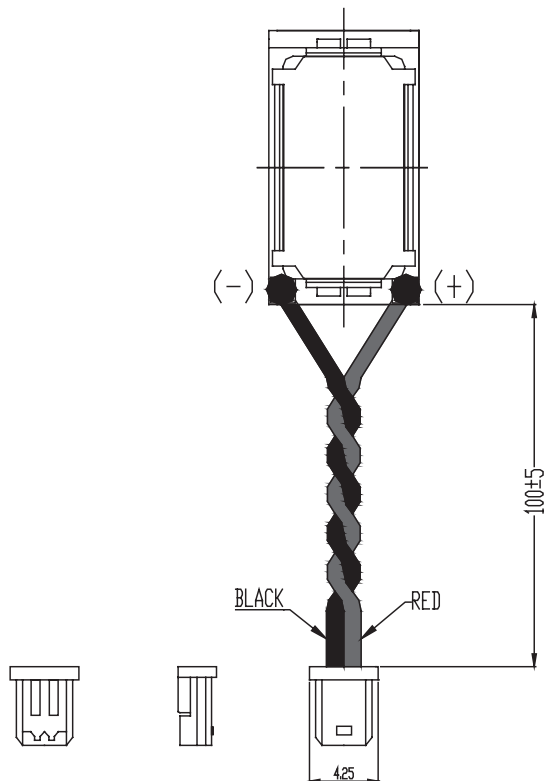
WIRE LEADS, NO CONNECTOR

wire: UL 1571 32 AWG



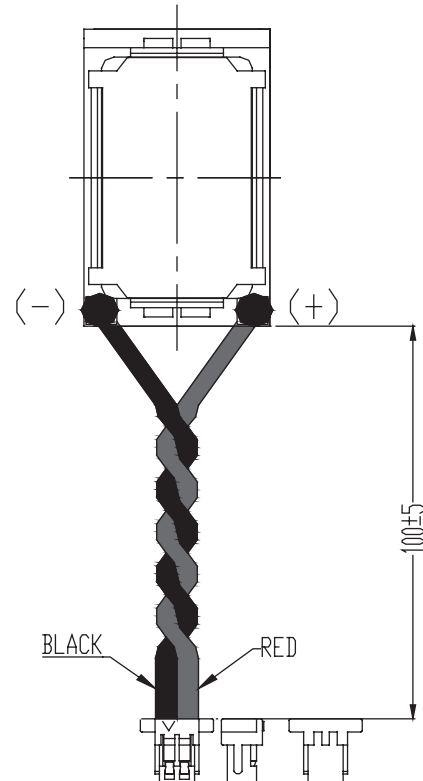
WIRE LEADS WITH MOLEX CONNECTOR

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



WIRE LEADS WITH JST CONNECTOR

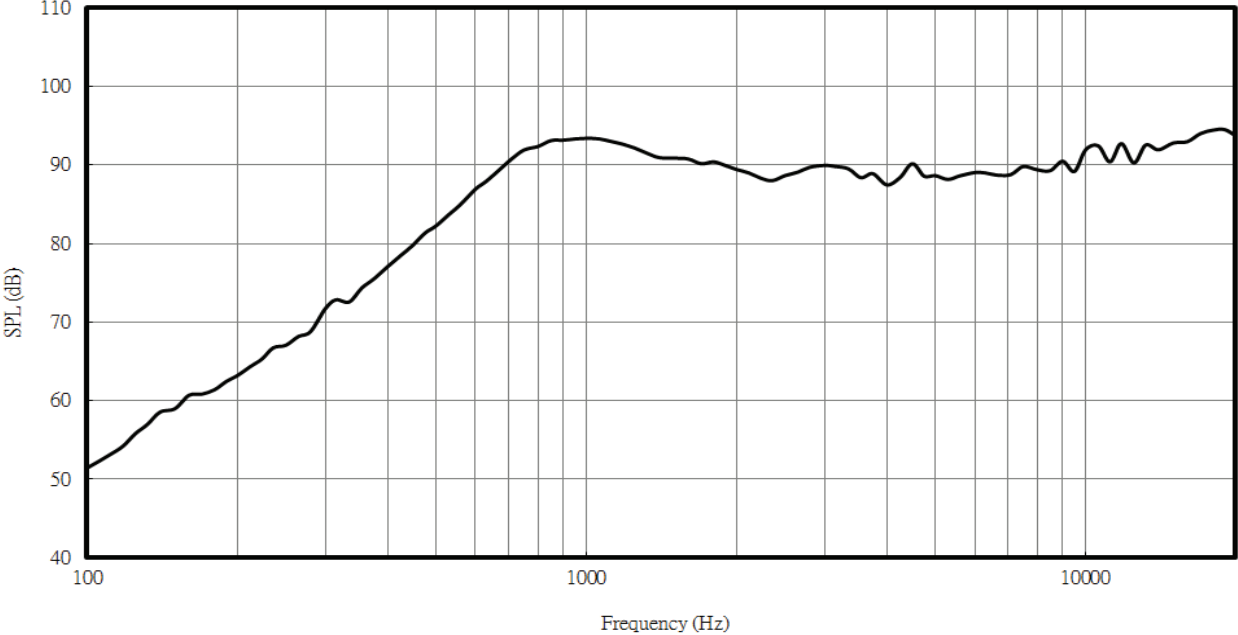
wire: UL 1571 30 AWG
connector: JST SHR-02V-S-B
mating connector: JST BM02B-SRSS-TB



RESPONSE CURVES

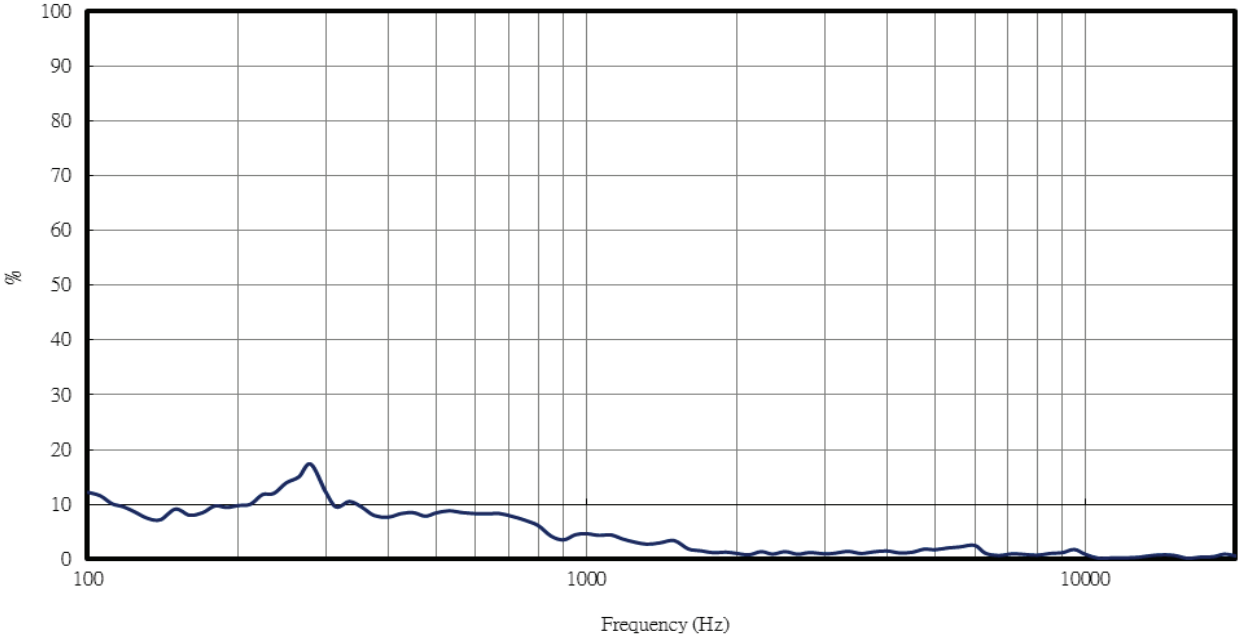
Frequency Response Curve

Test Conditions: 2.37 Vrms / 10 cm in 1 cc box



Total Harmonic Distortion Curve

Test Conditions: 2.37 Vrms / 10 cm in 1 cc box



THIELE-SMALL PARAMETERS

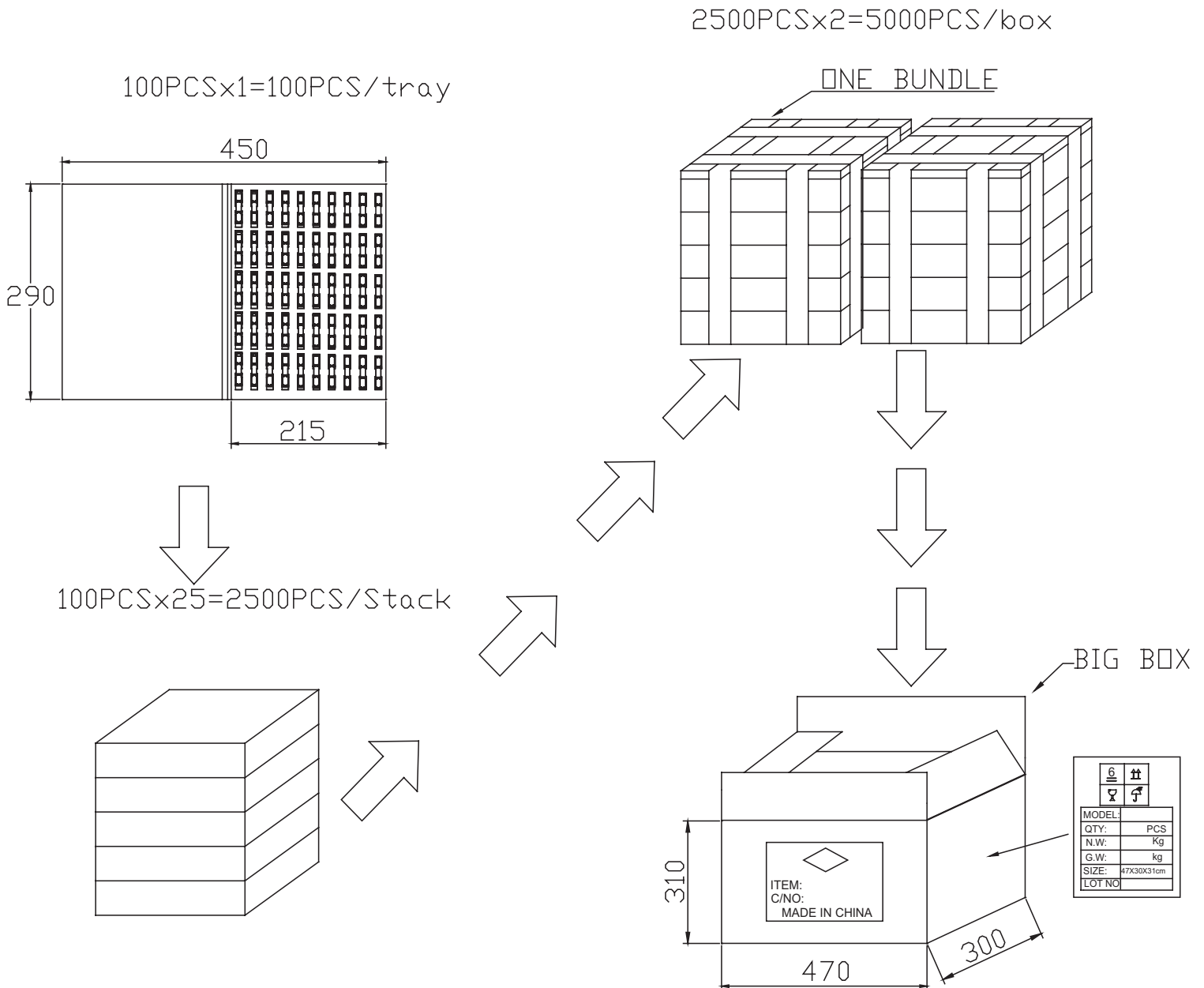
parameter	conditions/description	typ
Mechanical Q Factor	Qms	2.484
Electrical Q Factor	Qes	5.602
Total Q Factor	Qts	1.721
Compliance Equivalent Volume	Vas	0.0018

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

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



REVISION HISTORY

rev.	description	date
1.0	initial release	07/23/2018
1.01	brand update	01/24/2020
1.02	added Molex and JST connector options, updated packaging	10/23/2020
1.03	logo, datasheet style update	08/05/2022
1.04	CUI Devices rebranded to Same Sky	09/11/2024
1.05	added Thiele-Small Parameters	03/27/2025
1.06	updated IP rating	04/21/2025

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.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

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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