

**date** 08/05/2022

page 1 of 6

## SERIES: CMS-160925-078X-67 | DESCRIPTION: SPEAKER

#### **FEATURES**

- IP67 rated face
- protection against dust and water ingression
- · micro-speaker
- 2.5 mm height
- 5 available termination options







### **SPECIFICATIONS**

conditions/description	min	typ	max	units
max power: as per IEC-268-5, in 1 cc box		0.7	1.0	W
at 2.0 kHz, 2.37 Vrms	6.8	8	9.2	Ω
	6.48	7.2	7.92	Ω
at 1.0 Vrms in free air, 10 cm at 2.37 Vrms, in 1 cc box, 10 cm	440 680	550 850	660 1,020	Hz Hz
	100		20,000	Hz
at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box	87	90	93	dB
at 800~1,200 Hz, 2.37 Vrms, 10 cm at 1,201~5,000 Hz, 2.37 Vrms, 10 cm			15 10	% %
must be normal at sine wave, 0.2~2 kHz, 1 cc box			2.37	Vrms
cone moves forward w/ positive dc current to "+" terminal				
16 x 9 x 2.5				mm
Nd-Fe-B				
PEEK				
		1.3		g
	-20		70	°C
	-40		85	°C
for maximum 3 seconds (N/A for spring contacts)			380	°C
yes				
IP67 (front side)				
	max power: as per IEC-268-5, in 1 cc box at 2.0 kHz, 2.37 Vrms  at 1.0 Vrms in free air, 10 cm at 2.37 Vrms, in 1 cc box, 10 cm  at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box at 800~1,200 Hz, 2.37 Vrms, 10 cm at 1,201~5,000 Hz, 2.37 Vrms, 10 cm must be normal at sine wave, 0.2~2 kHz, 1 cc box cone moves forward w/ positive dc current to "+" terminal 16 x 9 x 2.5 Nd-Fe-B PEEK  for maximum 3 seconds (N/A for spring contacts) yes	max power: as per IEC-268-5, in 1 cc box  at 2.0 kHz, 2.37 Vrms  6.8  6.48  at 1.0 Vrms in free air, 10 cm  at 2.37 Vrms, in 1 cc box, 10 cm  680  100  at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box  87  at 800~1,200 Hz, 2.37 Vrms, 10 cm  at 1,201~5,000 Hz, 2.37 Vrms, 10 cm  must be normal at sine wave, 0.2~2 kHz, 1 cc box  cone moves forward w/ positive dc current to "+" terminal  16 x 9 x 2.5  Nd-Fe-B  PEEK  -20  -40  for maximum 3 seconds (N/A for spring contacts)  yes	max power: as per IEC-268-5, in 1 cc box  at 2.0 kHz, 2.37 Vrms  6.8  6.48  7.2  at 1.0 Vrms in free air, 10 cm  440  550  at 2.37 Vrms, in 1 cc box, 10 cm  at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box  87  90  at 800-1,200 Hz, 2.37 Vrms, 10 cm  at 1,201-5,000 Hz, 2.37 Vrms, 10 cm  must be normal at sine wave, 0.2-2 kHz, 1 cc box  cone moves forward w/ positive dc current to "+" terminal  16 x 9 x 2.5  Nd-Fe-B  PEEK  1.3  -20  -40  for maximum 3 seconds (N/A for spring contacts)  yes	max power: as per IEC-268-5, in 1 cc box       0.7       1.0         at 2.0 kHz, 2.37 Vrms       6.8       8       9.2         6.48       7.2       7.92         at 1.0 Vrms in free air, 10 cm       440       550       660         at 2.37 Vrms, in 1 cc box, 10 cm       680       850       1,020         100       20,000         at 0.7 W, 10 cm, avg 0.8, 1.0, 1.5, 2.0 kHz, 1 cc box       87       90       93         at 800~1,200 Hz, 2.37 Vrms, 10 cm       15       15         at 1,201~5,000 Hz, 2.37 Vrms, 10 cm       10       2.37         cone moves forward w/ positive dc current to "+" terminal       16 x 9 x 2.5       2.37         Nd-Fe-B       PEEK       1.3         PEEK       1.3         for maximum 3 seconds (N/A for spring contacts)       380

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

#### PART NUMBER KEY

CMS-160925-078 XX - 67

Base Number

Termination Options: S = spring contacts SP = solder pads

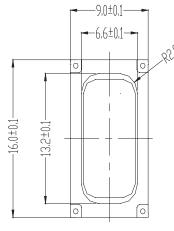
L100 = wire leads, no connector

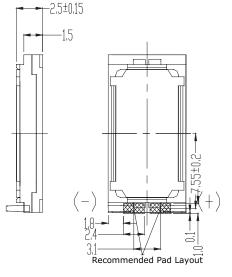
L100A = wire leads with Molex housing 51021-0200 L100B = wire leads with JST housing SHR-02V-S-B

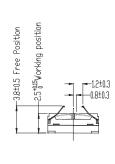
## **MECHANICAL DRAWINGS**

units: mm
tolerance: ±0.2 mm

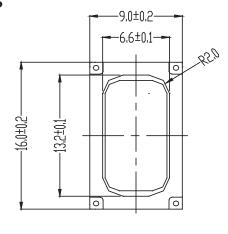
SPRING CONTACTS

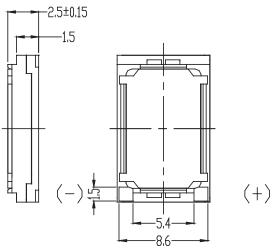






#### **SOLDER PADS**





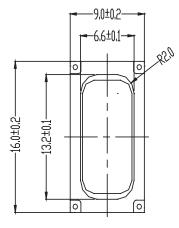
# **MECHANICAL DRAWINGS (CONTINUED)**

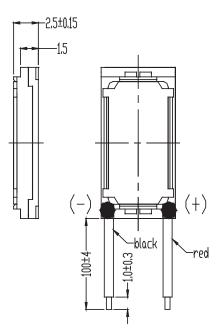
units: mm

tolerance: ±0.2 mm

### WIRE LEADS, NO CONNECTOR

wire: UL 1571 32 AWG

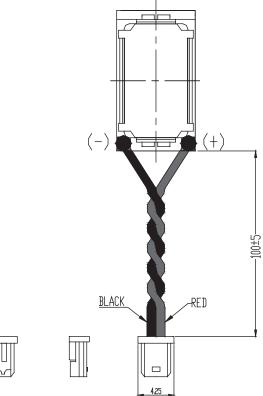




#### WIRE LEADS WITH MOLEX CONNECTOR

wire: UL 1571 30 AWG connector: Molex 51021-0200

mating connector: Molex 53261-0271

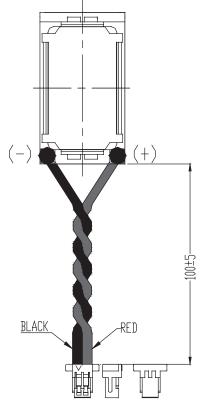


#### WIRE LEADS WITH JST CONNECTOR

wire: UL 1571 30 AWG

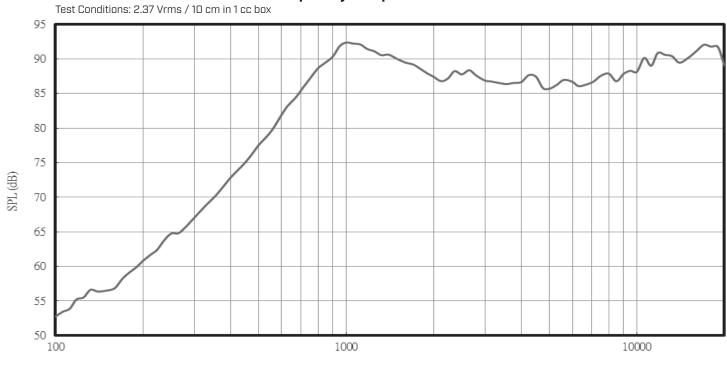
connector: JST SHR-02V-S-B

mating connector: JST BM02B-SR\$S-TB



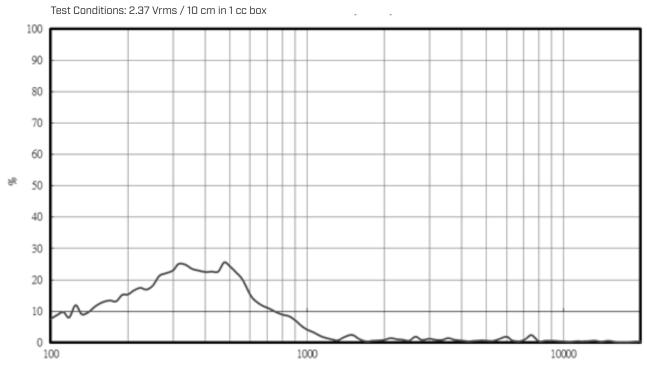
## **RESPONSE CURVES**

## **Frequency Response Curve**



Frequency (Hz)

#### **Total Harmonic Distortion Curve**



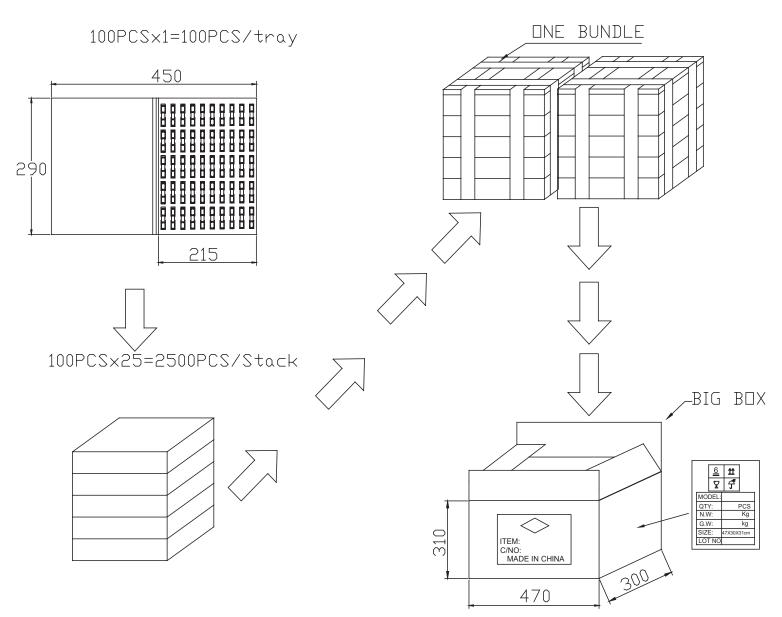
Frequency (Hz)

## **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





Additional Resources: Product Page | 3D Model | PCB Footprint

CUI DEVICES | SERIES: CMS-160925-078X-67 | DESCRIPTION: SPEAKER

**date** 08/05/2022 | **page** 6 of 6

#### **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	

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



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