Additional Resources: <u>Product Page</u> | <u>3D Model</u> | <u>PCB Footprint</u>

# **CUI** DEVICES

date 10/23/2020

page 1 of 6

SERIES: CMS-151125-078X-67 | DESCRIPTION: SPEAKER

#### **FEATURES**

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







#### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	max power: as per IEC-268-5, 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 at 2.37 Vrms in 1 cc box, 10 cm	560 800	700 1,000	840 1,200	Hz 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 800~1200 Hz, 2.37 Vrms, 10 cm at 1,201~5,000 Hz, 2.37 Vrms, 10 cm			15 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 "+" ter	rminal			
dimensions	15 x 11 x 2.5				mm
magnet	Nd-Fe-B				
cone material	mylar				
weight			1.5		g
operating temperature		-20		70	°C
storage temperature		-30		85	°C
hand soldering	for maximum 3 seconds (N/A for spring contacts)			380	°C
RoHS	yes				
IP level	IP67 (front side)	<u></u>	<u> </u>		

Notes: 1. All specifications measured at  $15\sim35^{\circ}$ C, humidity at  $25\sim75\%$ , under  $86\sim106$  kPa pressure, unless otherwise noted.

#### **PART NUMBER KEY**

<u>CMS-151125-078</u> <u>XX</u> - 67

Base Number

Termination Options: S = spring contacts SP = solder pads

L100 = wire leads, no connector

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

cuidevices.com

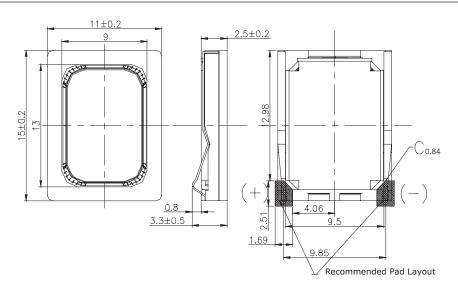
Additional Resources: Product Page | 3D Model | PCB Footprint

CUI Devices | SERIES: CMS-151125-078X-67 | DESCRIPTION: SPEAKER

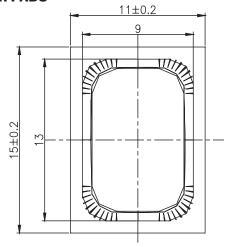
date 10/23/2020 | page 2 of 6

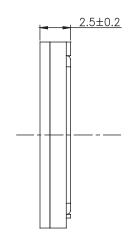
# **MECHANICAL DRAWINGS**

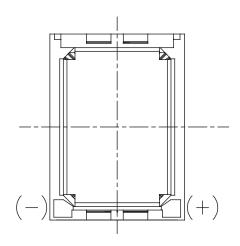
units: mm tolerance: ±0.2 mm **SPRING CONTACTS** 



## **SOLDER PADS**





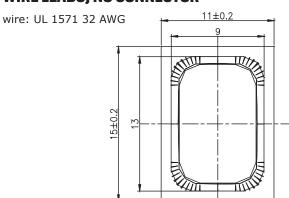


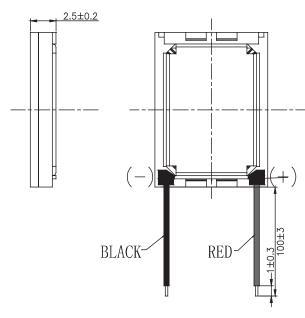
# **MECHANICAL DRAWINGS (CONTINUED)**

units: mm

tolerance: ±0.2 mm

### **WIRE LEADS, NO CONNECTOR**

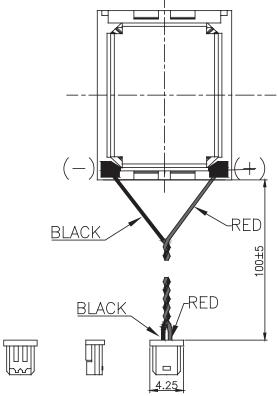




#### **WIRE LEADS WITH MOLEX CONNECTOR**

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

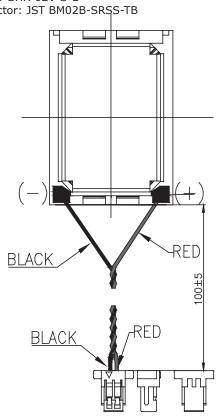
mating connector: Molex 53261-0271



#### **WIRE LEADS WITH JST CONNECTOR**

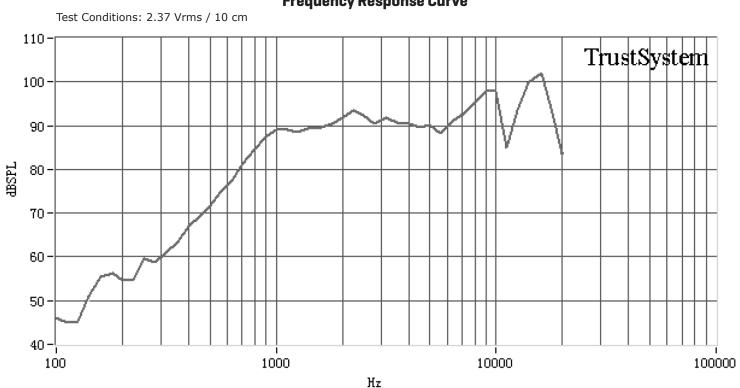
wire: UL 1571 30 AWG connector: JST SHR-02V-S-B

mating connector: JST BM02B-SRSS-TB

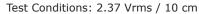


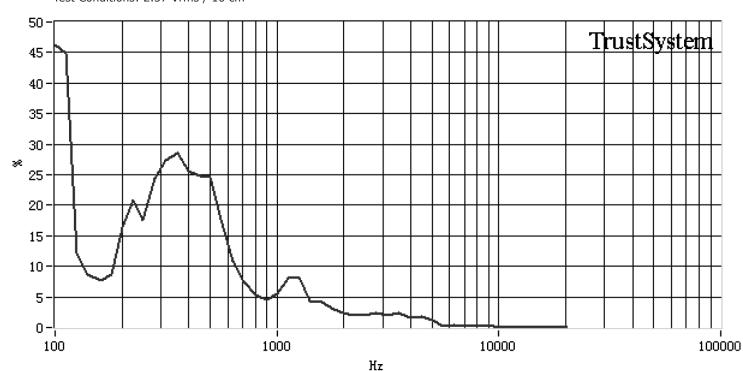
# **RESPONSE CURVES**

# **Frequency Response Curve**



## **Total Harmonic Distortion Curve**

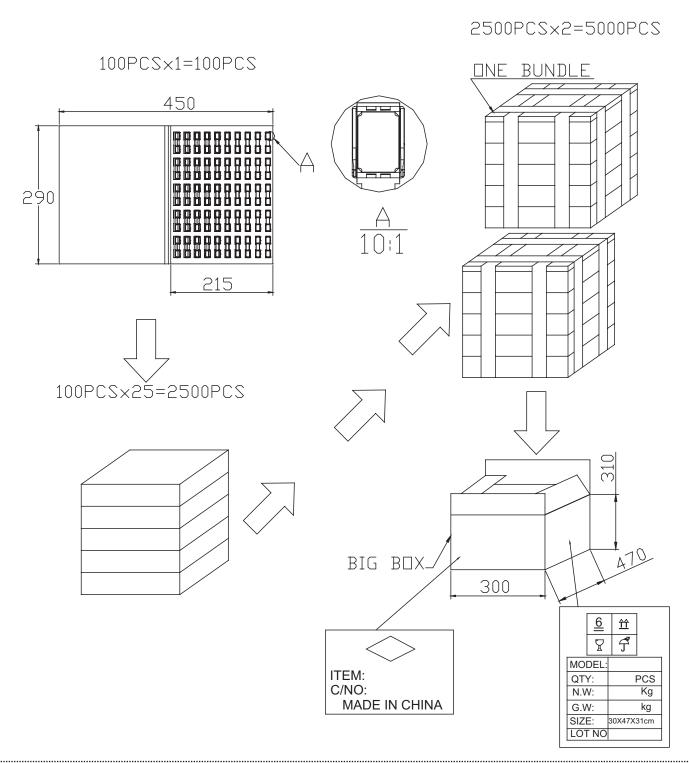




#### **PACKAGING**

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

#### **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	

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

# **CUI** DEVICES

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

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

CUI Devices 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.

cuidevices.com