

**date** 08/05/2022

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## SERIES: CMS-15113-078X-67 | DESCRIPTION: SPEAKER

#### **FEATURES**

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







#### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	max power: as per IEC-268-5, in 1 cc box		0.7	1.0	W
impedance	at 2.0 kHz, 2.37 Vrms	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 800~1,200 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 "+" terminal				
dimensions	15 x 11 x 3				mm
magnet	Nd-Fe-B				
cone material	PEEK				
weight			1.5		g
operating temperature		-20		70	°C
storage temperature		-40		85	°C
hand soldering	for maximum 3 seconds (N/A for spring contacts)			380	°C
RoHS	yes	·			
IP level	IP67 (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-15113-078 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 Additional Resources: Product Page | 3D Model | PCB Footprint

## **MECHANICAL DRAWINGS**

units: mm tolerance: ±0.2 mm

SPRING CONTACTS

8.6

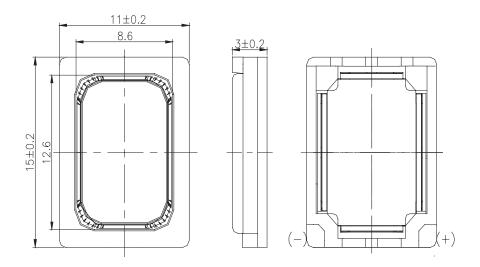
3±0.2

4.9±0.15

9.2

9.4

#### **SOLDER PADS**



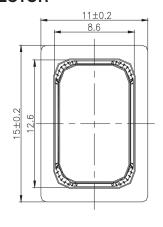
Recommended Pad Layout

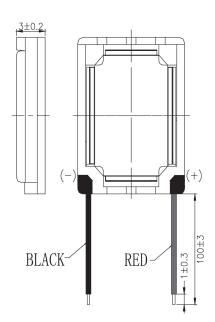
# **MECHANICAL DRAWINGS (CONTINUED)**

units: mm tolerance: ±0.2 mm

## WIRE LEADS, NO CONNECTOR

wire: UL 1571 32 AWG

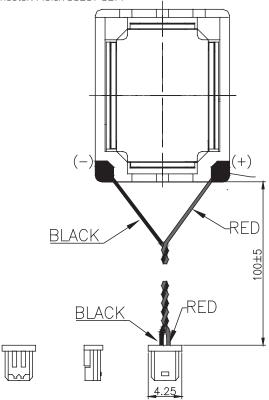




#### WIRE LEADS WITH MOLEX CONNECTOR

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

mating connector: Molex 53261-0271

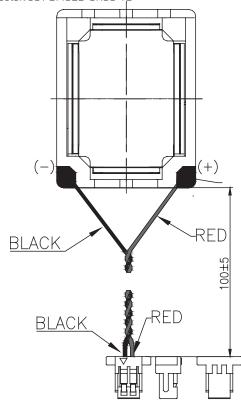


#### WIRE LEADS WITH JST CONNECTOR

wire: UL 1571 30 AWG

connector: JST SHR-02V-S-B

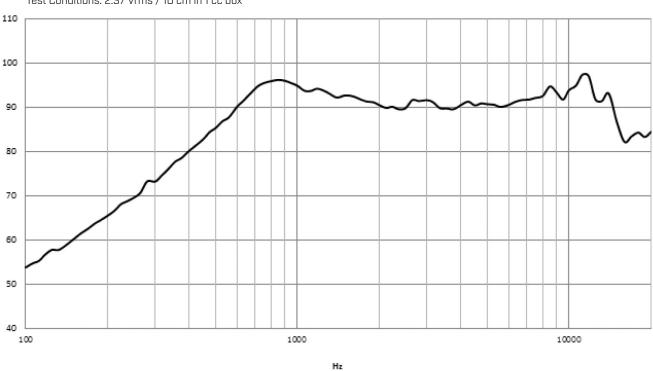
mating connector: JST BM02B-SRSS-TB



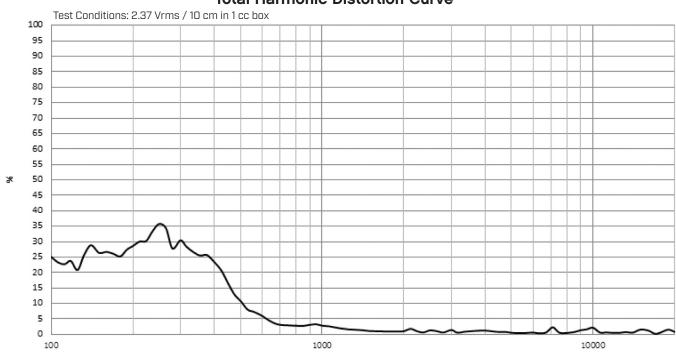
## **RESPONSE CURVES**

## **Frequency Response Curve**

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



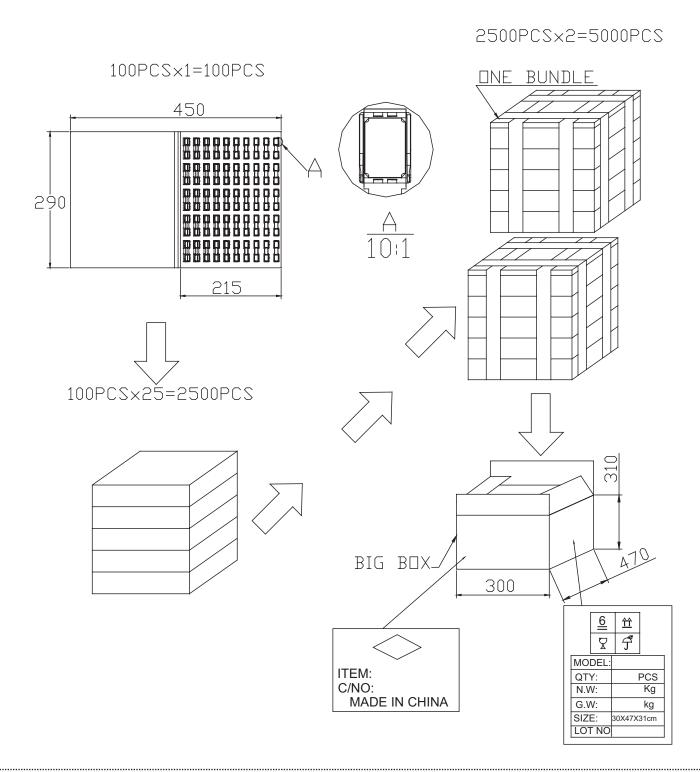
### **Total Harmonic Distortion Curve**



## **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	

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



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