

**MODEL:** CMS-231137-158SP-X8 | **DESCRIPTION:** SPEAKER

**FEATURES**

- IPX8 rated
- rated 1.5 W
- 8  $\Omega$

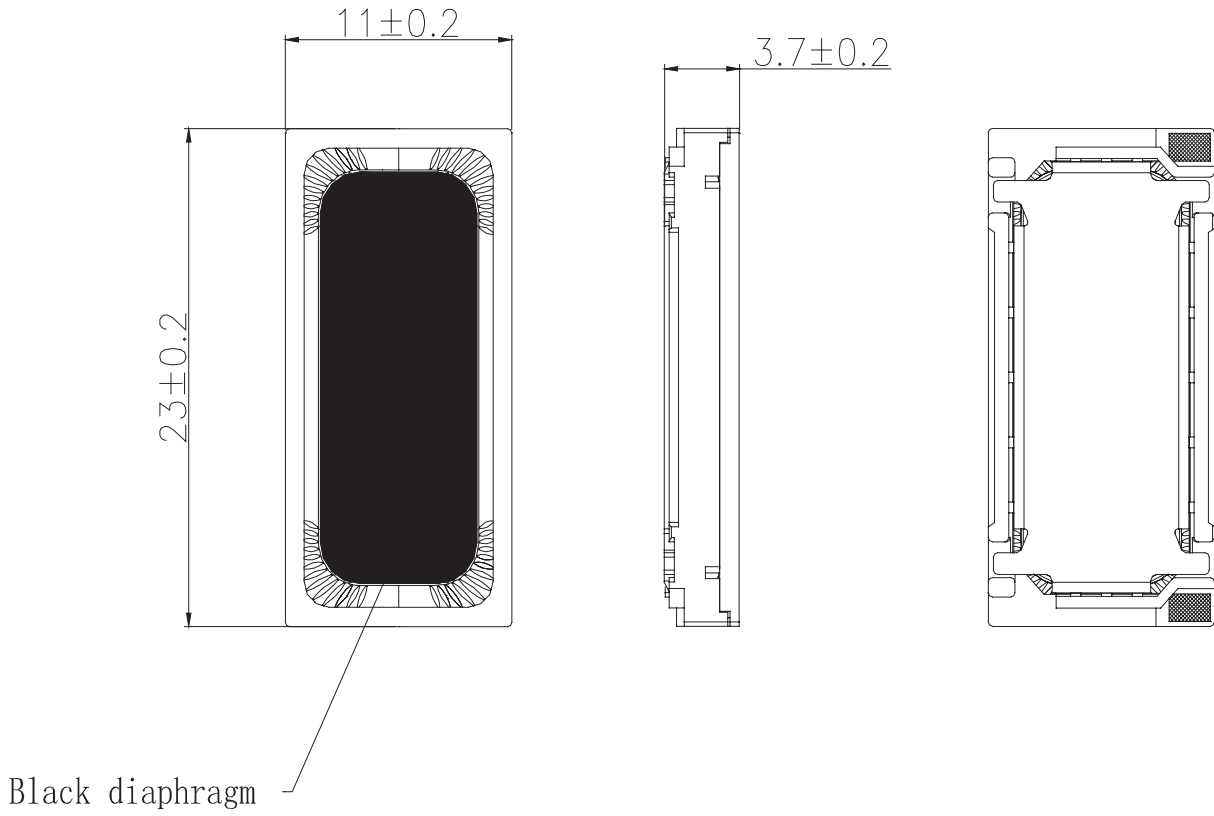

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power	max power: as per IEC-268-5, in 1 cc box		1.5	1.7	W
impedance	at 2.0 kHz, 3.46 Vrms	6.8	8	9.2	$\Omega$
coil resistance		6.12	7.2	8.28	$\Omega$
resonant frequency [Fo]	at 3.46 Vrms, 10 cm in 1 cc box	800	1,000	1,200	Hz
frequency response		Fo		20,000	Hz
sound pressure level	at 3.46 Vrms, 10 cm, avg 1.0, 1.5, 2.0 kHz, 1 cc box	100	103	106	dB
distortion	at 2.0 kHz, 3.46 Vrms, 10 cm			10	%
buzz, rattle, etc.	must be normal at sine wave, 0.2~ 2 kHz, in 1 cc box			3.46	V
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	23 x 11 x 3.7				mm
magnet	Nd-Fe-B				
frame material	PPA				
cone material	PEEK				
terminal	solder pads				
weight		2.5	3	3.5	g
operating temperature		-20		60	$^{\circ}$ C
storage temperature		-20		70	$^{\circ}$ C
hand soldering	for maximum 3 seconds			380	$^{\circ}$ C
RoHS	yes				
IP level	IPX8 (front side)				

Notes: 1. All specifications measured at 15-35 $^{\circ}$ C, humidity at 25-75%, under 86-106 kPa pressure, unless otherwise noted.

## MECHANICAL DRAWING

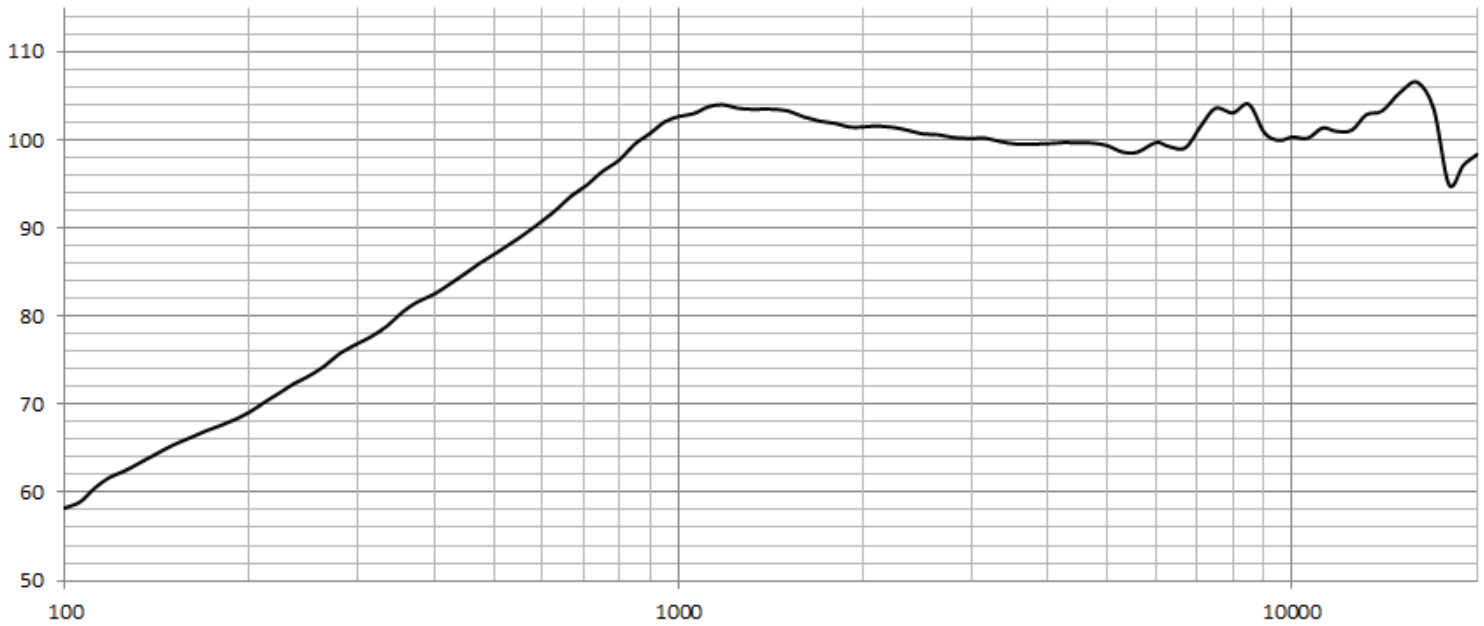
units: mm  
tolerance:  $\pm 0.2$  mm



## RESPONSE CURVES

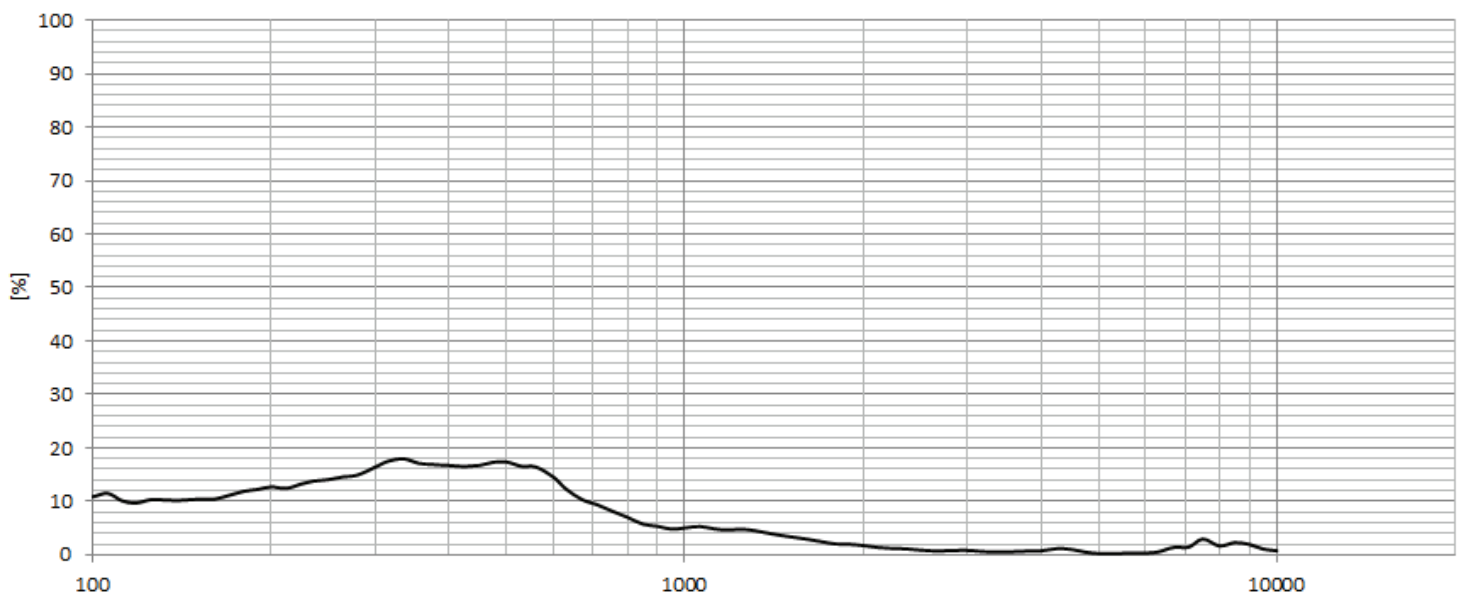
### Frequency Response Curve

Test Conditions: 3.46 Vrms / 10 cm in 1 cc box



### Total Harmonic Distortion Curve

Test Conditions: 3.46 Vrms / 10 cm in 1 cc box



## PACKAGING

units: mm

Tray QTY: 50 pcs per tray  
 Carton Size: 470 x 300 x 310 mm  
 Carton QTY: 2,500 pcs per carton

