

**MODEL:** CMS-3648-158SP | **DESCRIPTION:** SPEAKER

**FEATURES**

- 8 ohm
- rated 1.5 W
- solder pads
- IPX5


**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
input power			1.5	2	W
impedance		6.8	8	9.2	$\Omega$
resonant frequency (Fo)		480	600	720	Hz
frequency response		Fo		14,000	Hz
sound pressure level	at 1.0 W, 50 cm, avg 0.8, 1.0, 1.2, 1.5 kHz	89	92	95	dB
	at 1.0 W, 100 cm, avg 0.8, 1.0, 1.2, 1.5 kHz	83	86	89	dB
distortion	at 1.0 kHz, 1.0 W, 50 cm			5	%
buzz, rattle, etc.	must be normal at sine wave, frequency range			3.46	V
polarity	cone moves forward w/ positive dc current to "+" terminal				
dimensions	$\varnothing 36 \times 4.8$				mm
magnet	Nd-Fe-B				
frame material	iron				
cone material	PEN				
terminal	solder pads				
weight			8.2		g
operating temperature		-20		55	$^{\circ}\text{C}$
storage temperature		-25		60	$^{\circ}\text{C}$
hand soldering	for maximum 2 seconds	360		380	$^{\circ}\text{C}$
RoHS	yes				
IP level	IPX5				

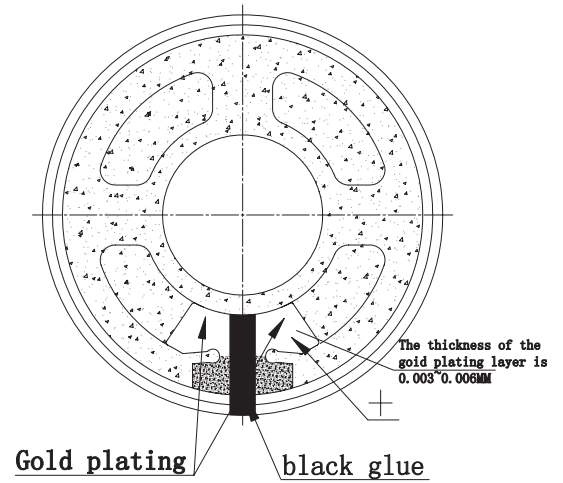
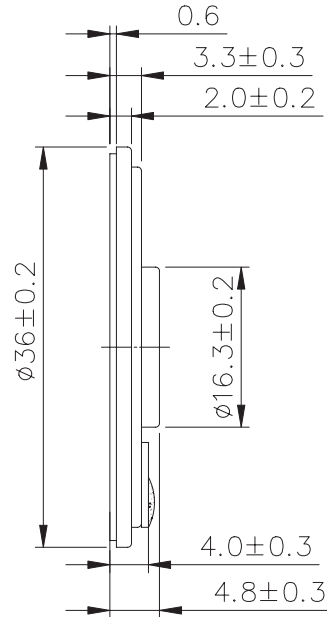
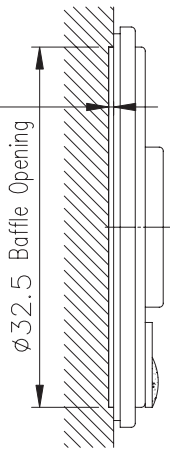
Notes: 1. All specifications measured at 15-35 $^{\circ}\text{C}$ , humidity at 25-75%, unless otherwise noted.

## MECHANICAL DRAWING

units: mm  
tolerance:  $\pm 0.2$  mm

### MOUNTING NOTICE

AT LEAST  
0.8mm  
FOR  
DIAPHRAGM  
MOVING

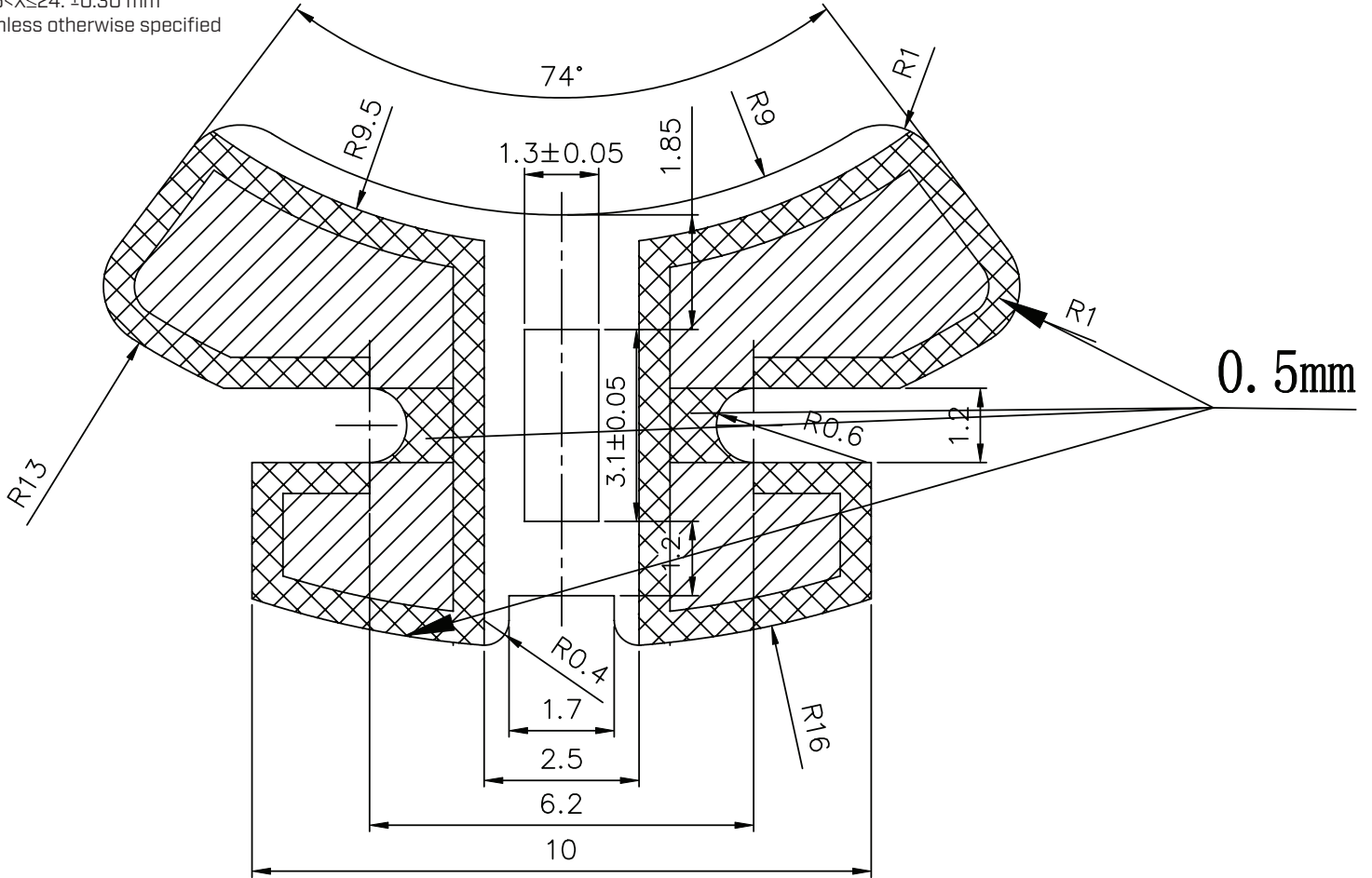


### NOTE:

- With Gold plated contact pads
- There is no any tin / solder on this Gold plated contact pads
- The centre of diaphragm can't exceed the gasket ring

## MECHANICAL DRAWING (CONTINUED)

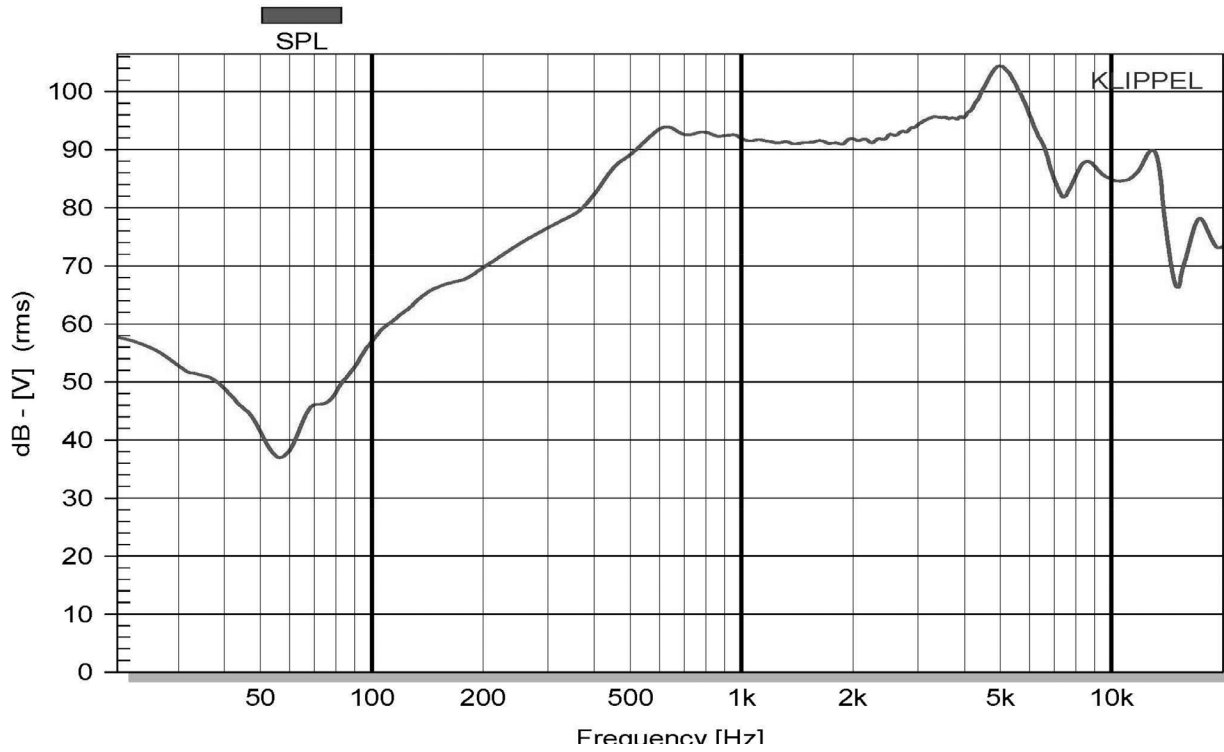
units: mm  
 tolerance:  
 $X \leq 8$ :  $\pm 0.15$  mm  
 $8 < X \leq 16$ :  $\pm 0.20$  mm  
 $16 < X \leq 24$ :  $\pm 0.30$  mm  
 unless otherwise specified



## RESPONSE CURVES (AT 50 CM)

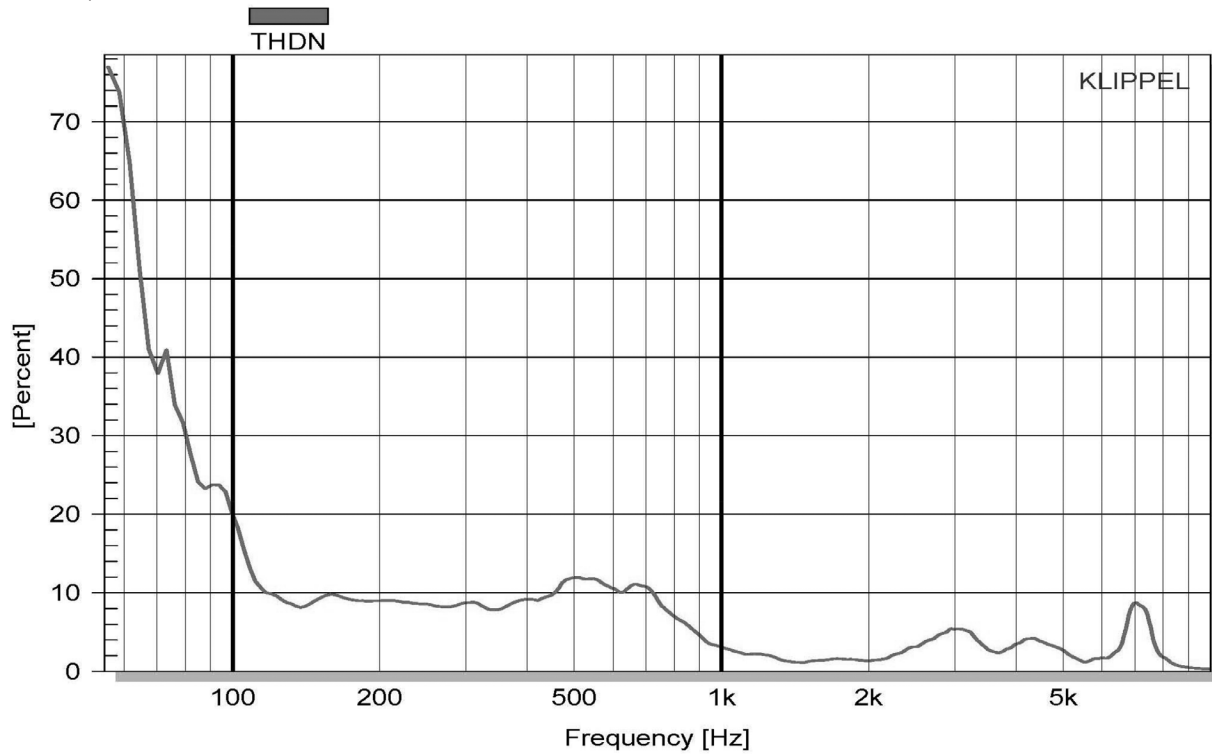
### Frequency Response Curve

Test Conditions: 2.83V / 50 cm



### Total Harmonic Distortion Curve

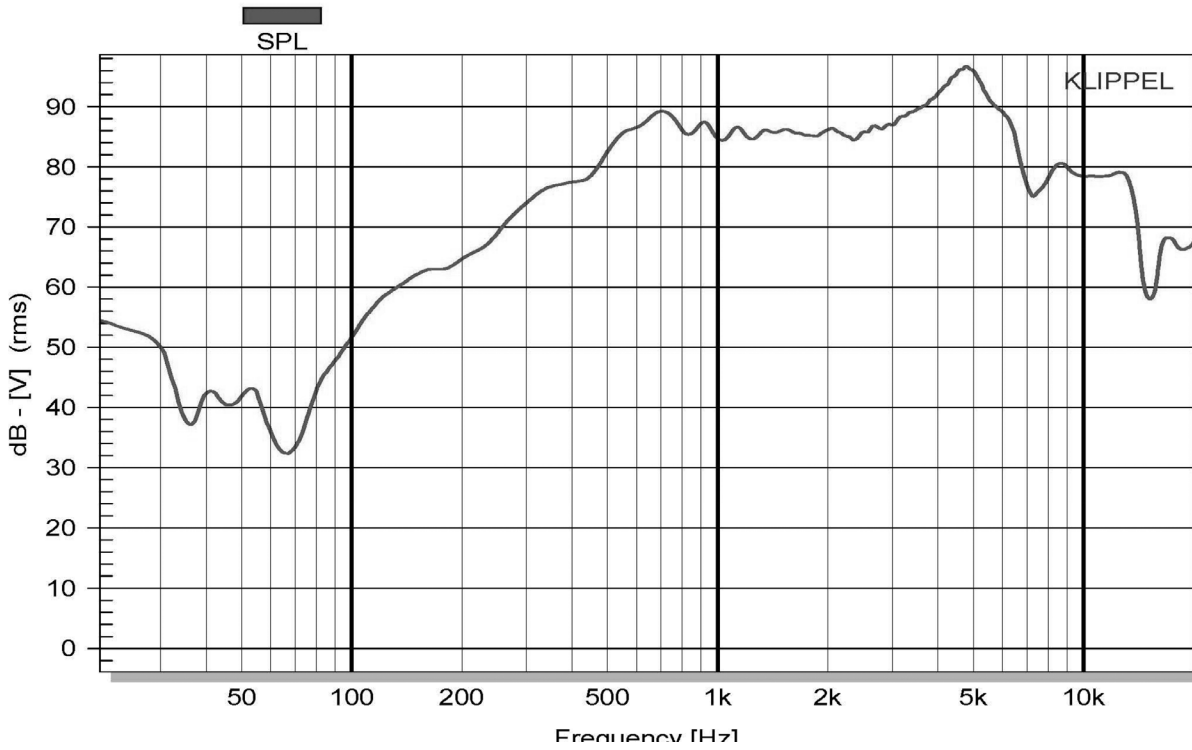
Test Conditions: 2.83V / 50 cm



## RESPONSE CURVES (AT 100 CM)

### Frequency Response Curve

Test Conditions: 2.83 V / 100 cm



### Total Harmonic Distortion Curve

Test Conditions: 2.83 V / 100 cm

