

## HIHX9C005-8 Audio & Haptic Exciter



### Features

- Impedance: 8Ω
- Dimensions: 26mm x 12mm
- Thickness: 6.5mm
- Mass: 2.9g

### Applications

- Combined haptics and audio
- Tablet PC touch screens
- e-Book Reader touch screens
- Appliance control panels

### Description

The HIHX9C005-8 is a miniature 9mm exciter which delivers significant resonant output at specific haptic frequencies in addition to a nominally flat frequency response over the audio bandwidth.

The exciter is designed to be attached to the reverse side of a rigid panel and generates bending waves to produce both sound and tactile (haptic) feedback.

The HIHX9C005 is also available in 4, 16 and 32 ohm versions.

### Parameters

Parameter	Description	min	typ	max	Units
$R_e$	DC resistance	-10%	7.7	+10%	Ohms
$L_e$	Inductance (@ 10kHz)	-10%	0.07	+10%	mH
$BL$	Force factor	-10%	1.0	+10%	Tm
$f_s$	Resonance frequency	-20%	300	+20%	Hz
$f_m$	Magnet resonance	-20%	175	+20%	Hz
$d_{Drv}$	Voice coil diameter		8.7		mm
$M_{ms}$	Moving mass		0.13		g
$C_{ms}$	Compliance		0.50		mmN <sup>-1</sup>
$R_{ms}$	Suspension Loss		0.020		Nsm <sup>-1</sup>

Operating conditions

Condition	Value
Continuous power handling (weighted pink noise)	0.5W
Burst power handling (weighted pink noise)	>1 W
Operating temperature range	-20 to 55° C
Audio frequency range	300Hz to 15kHz
Haptic frequency range	150Hz to 300Hz

Response

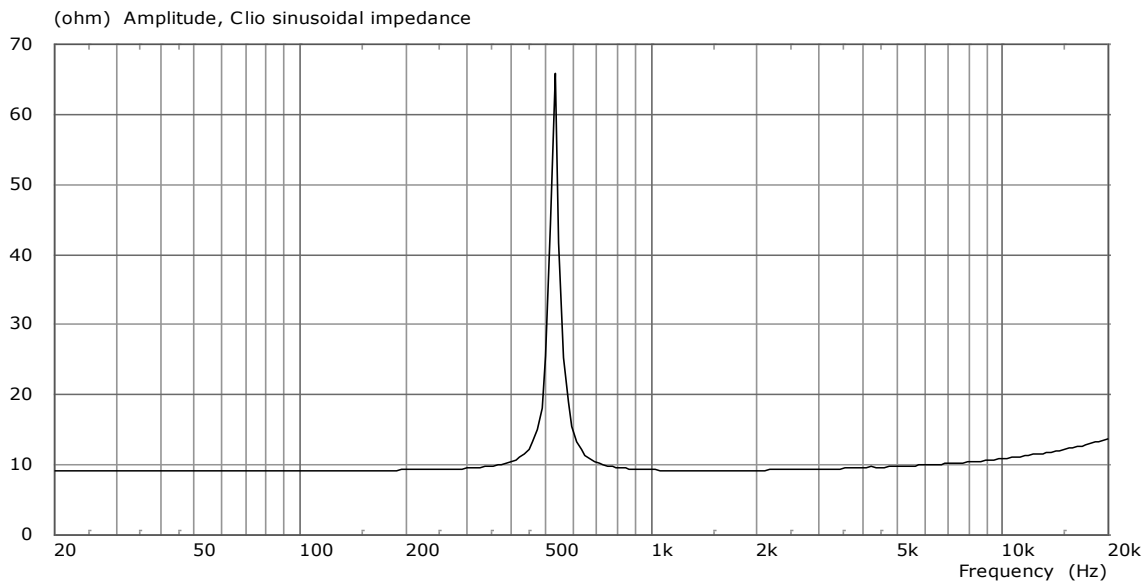


Figure 1. Impedance vs. frequency, free coil.

Outline Drawing

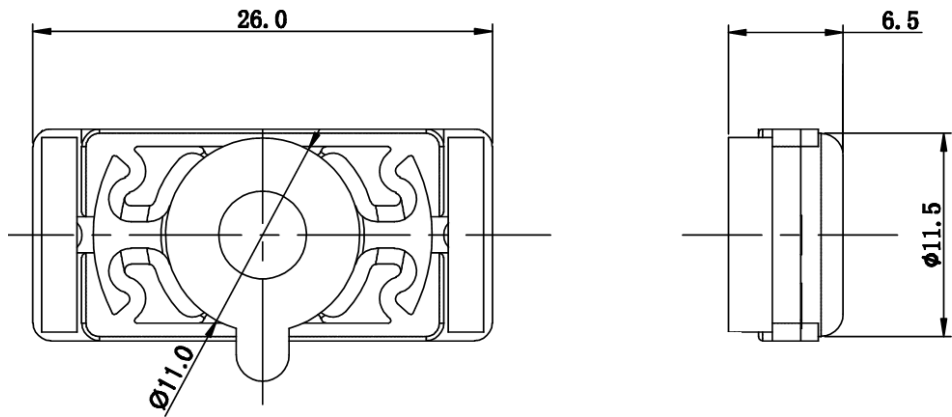


Figure 2. Nominal dimensions.