

HiHX14C02-8 Audio & Haptic Exciter

✓RoHS
COMPLIANT



Features

- Nominal impedance: 8 Ω
- Dimensions: 37mm x 20mm
- Thickness: 9.85mm
- Mass: 12.8g
- Nominal power rating 0.8W RMS
- Self-adhesive fixing (3M VHB 9473PC)

Applications

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

Description

The HiHX14C02-8 is a 14mm 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.

Parameters

Parameter	Description	min	typ	max	Units
R_e	DC resistance	-15%	7.8	+15%	Ohms
L_e	Inductance (@ 10kHz)	-15%	0.13	+15%	mH
BL	Force factor	-	2.4	-	T.m
f_s	Free coil resonance	-10%	600	+10%	Hz
f_m	Magnet resonance	-10%	100	+10%	Hz
M_{ms}	Moving mass	-	355	-	mg
M_{mm}	Magnet mass	-	12.7	-	g
C_{ms}	Compliance	-	$0.20e^{-3}$	-	$m.N^{-1}$
R_{ms}	Suspension Loss	-	$60e^{-3}$	-	$N.s.m^{-1}$
d_{Drv}	Voice coil diameter	-	14	-	mm

Operating conditions

Condition	Value
Continuous power handling (weighted pink noise)	0.8W
Burst power handling (weighted pink noise)	>0.8 W
Operating temperature range	-20 to 55° C
Audio frequency range	300Hz to 20kHz
Haptic frequency range	90Hz to 300Hz

Response

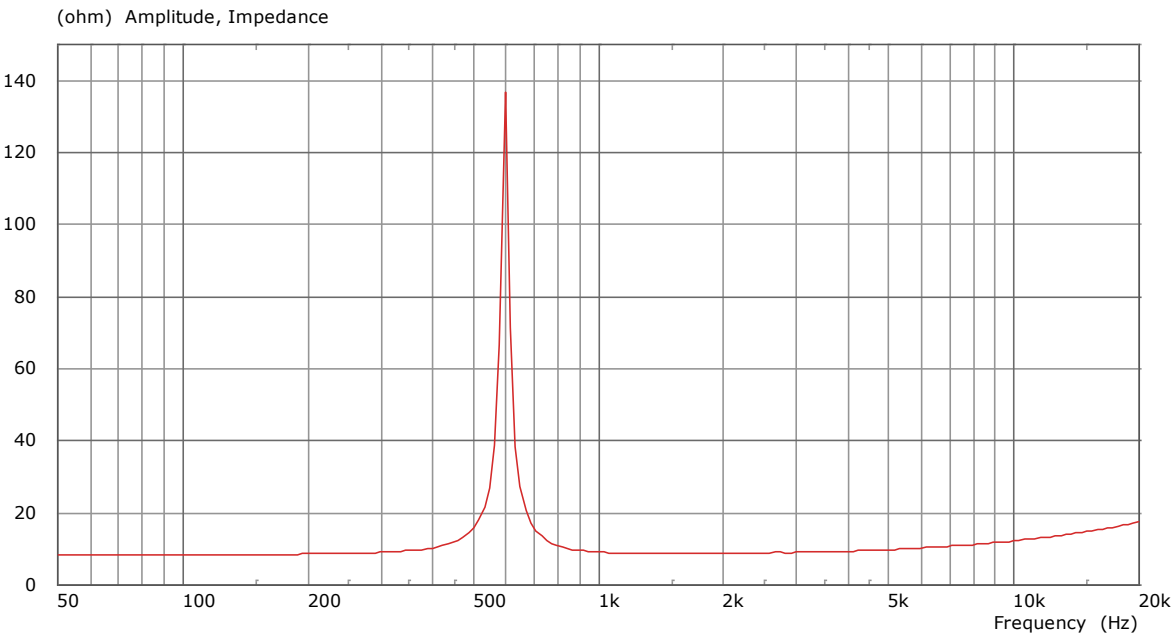


Figure 1. Impedance vs. frequency

Outline Drawing

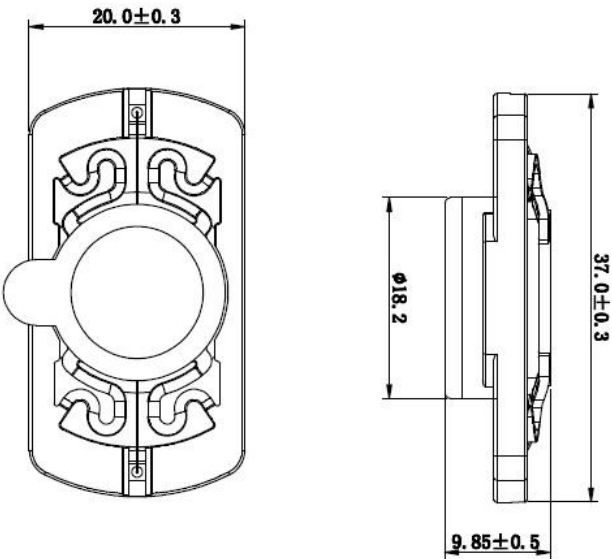


Figure 2. Nominal dimensions