

Revised at 16<sup>th</sup> Apr, 2019**BFC-4448-24-4-006 v.01b****LOW DISTORTION FULL RANGE SPEAKER**

STAPEZ™ brand low distortion speaker.

FEATURE HIGHLIGHTS:

- Special suspension system ensures low distortions even below resonance frequency ( $f_0$ )
- Copper Clad Aluminum wire voice coil
- Two Neodymium magnet motor design
- High power handling : 3W (continuous), 6W (transient)
- Peak-to-peak excursion of 4.5mm

APPLICATIONS:

- Portable Bluetooth speakers
- WiFi Smart Voice-Assistant speakers
- Computer monitors with high audio performance
- Smart furniture, home automation
- DIYers, Makers, and Robotics
- General speaker usage demanding better performance

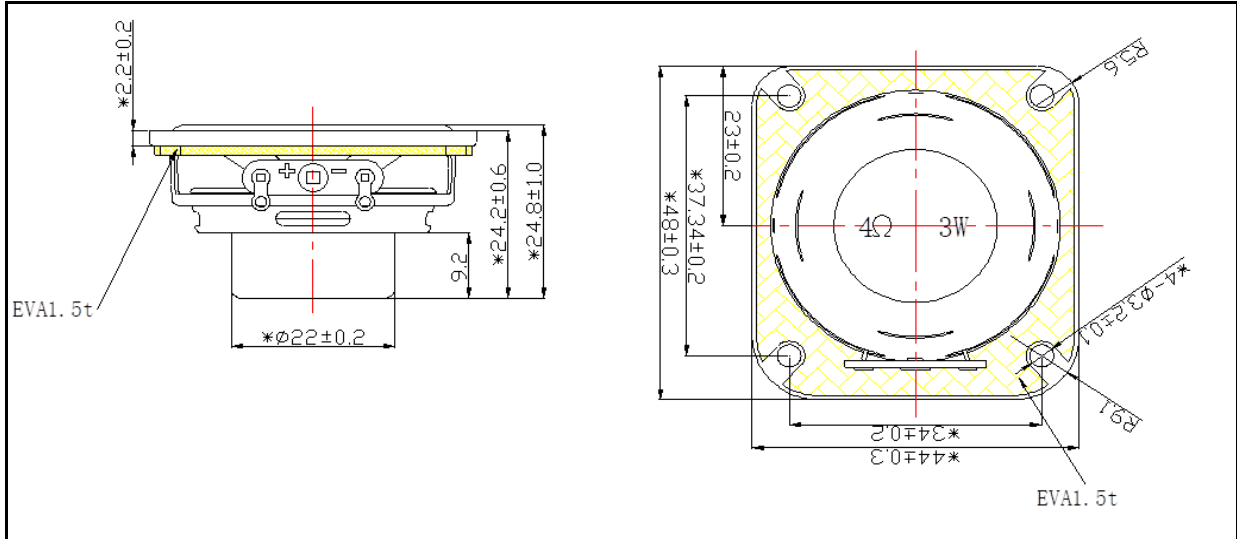


1:1 size in A4 paper



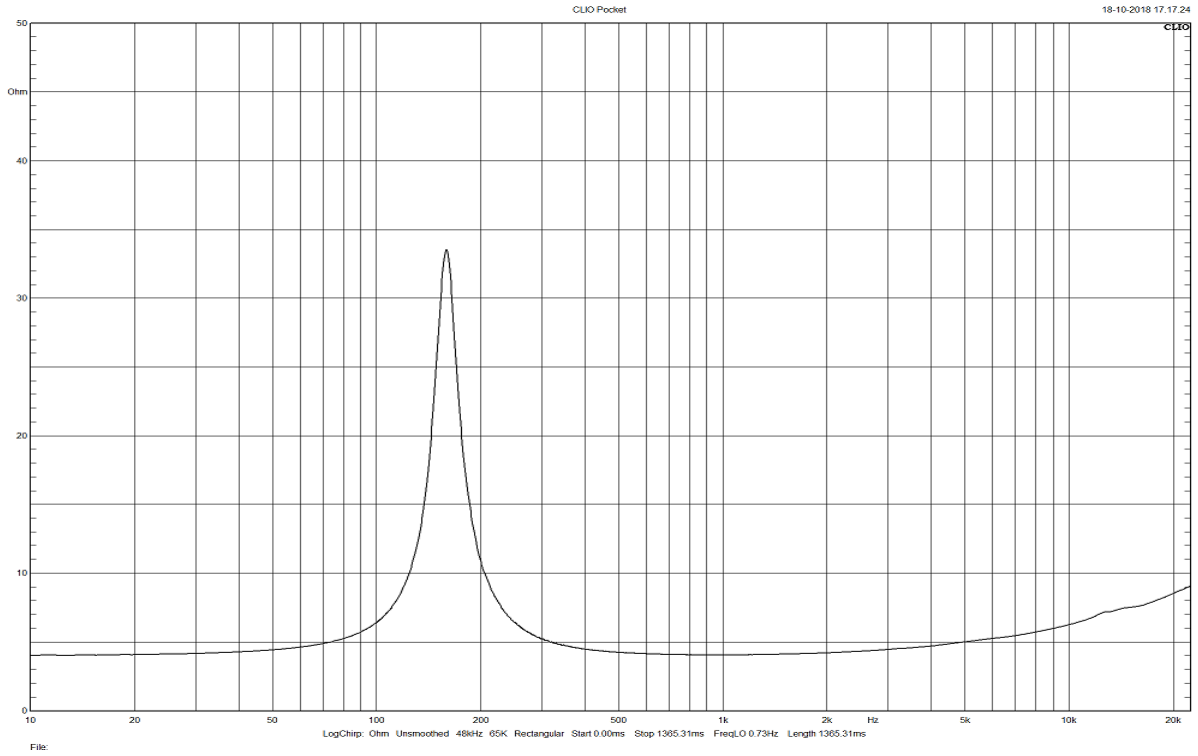
DRAWINGS AND DIMENSIONS:

All units are in mm unless specified.

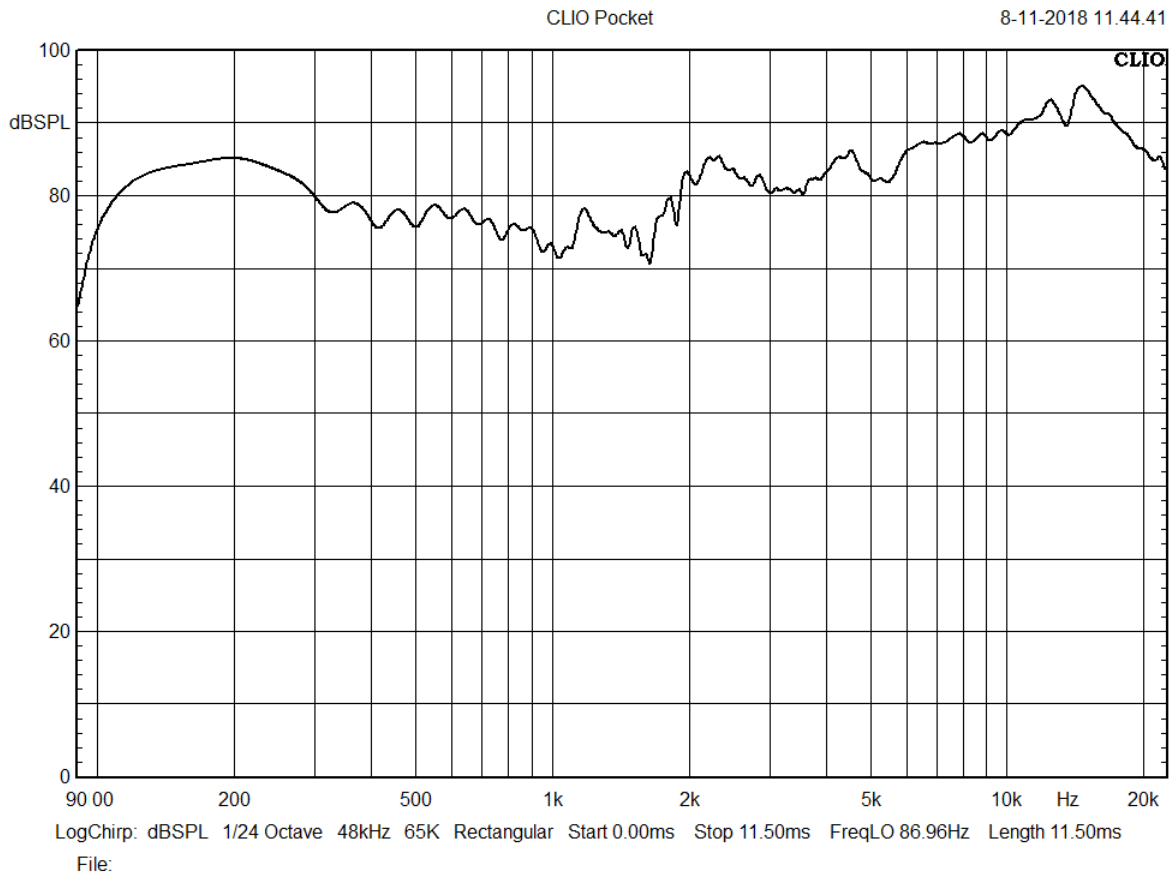




IMPEDANCE CURVE VS FREQUENCY:



FREQUENCY RESPONSE CURVE:





ELECTRICAL, ACOUSTICAL, AND THIELE/SMALL PARAMETERS:

Parameter	Min.	Typical	Max.	Testing Conditions
DC Resistance (Re)		4Ω		
Resonance Frequency (Fs)		160Hz		
Continuous Power (thermal)		3W		
Max. Power (transient)		6W		
Excursion, peak-to-peak (Xmax)		4.5mm		
Moving Mass (Mms)		0.7g		
Effective Radiating-area (Sd)		9.6 cm <sup>2</sup>		
Force Factor (BL)		1.75		
Specific Force Factor (BL/√Re)		0.88		
Compliance, free-air (Cms)		0.61mm/N		
Eqv. Compliance Volume (Vas)		0.19L		
Voice Coil Inductance (Le)		0.01mH		
Diaphragm Displacement Volume, peak-to-peak(Vd)		4.32 cm <sup>3</sup>		
Sensitivity (1V/0.5m@1kHz)		87dBSpl		
NdFeB magnet rating		N35		
NdFeB magnet weight		8.8g		
Auxiliary magnet weight		5.8g		
Voice-coil magnet wire weight		0.107g		
Driver Weight		37.7g		
Voice-coil magnet wire grade		EISV		
Magnet wire material		CCAW		
Max. Voice-coil Temperature		180°C		
Operating Temperature		-10 to 40 °C		
Storage Temperature		-20 to 70 °C		