

6"

CX6F-140F

Coaxial Ferrite-Neodymium Driver



Key features:

- LF AND HF COMBINED MAGNETIC CIRCUIT
- COMPACT, BUT POWERFUL SPEAKER
- MAGNETIC CIRCUIT COMBINING FERRITE AND NEODYMIUM MAGNETS

Design notes:

The CX6F-140F is a high efficiency, (95dB 1watt / 1 meter) 6.5-inch coaxial speaker with very linear frequency response characteristics and high power handling capability. The mid-woofer utilizes REDCATT developed paper pulp cone that has proven its performance in many of our successful designs. The HF section was designed around our most successful dome assembly as used in 140FCD. The mini waveguide is CNC machined from single piece of aluminum,

given the whole assembly incredible precision. The combination of used materials with our state of the art quality production yields in well performing driver even in the most demanding extreme conditions.

Magnetic circuit design REDCATT engineers have developed ferrite-neodymium based magnetic circuit, capable of delivering the highest level of performance in a small form factor. The

combination of ferrite and neodymium delivers an excellent magnetic performance. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Aluminum demodulation ring is assembled in the HF section.

Specifications:

General specs (LF/HF)

Nominal Diameter: 6in (36mm)

Rated Impedance: 8 / 4 Ohm

Power handling (LF/HF)

AES Power: 200 / 35 Watts

Program Power: 400 / 70 Watts

Peak Power: 800 / 140 Watts

Voice Coil (LF/HF)

Diameter: 1.75 in. / 36mm

Winding wire: CCAW / ALU

Former: TIL / Kapton

Winding height: 10.3 mm / N/A

T/S Parameters (LF/HF)

Resonant frequency: 112 / 1,000 Hz

Re: 5.9 / 3.8 ohm

Qes: 0.6 / N/A

Qms: 4.64 / N/A

Qts: 0.53 / N/A

Vas: 6.1 liters / N/A

Sd: 141cm² / N/A

Sensitivity: 95 / 108 dB

Mms: 9.2 g / N/A

Bl: 8

Le: 0.23 mH / N/A

Design details (LF/HF)

Surround Material: fabric / poly.

Cone/ dome material: paper / poly.

Spider: Nomex

Plate thickness: 6 mm / N/A

Peak to peak linear cone Displacement: 8.8 mm / N/A

Overall diameter: 165.2 mm

Bolt circle diameter: 156.6 mm

Baffle cutout dia.: 143.9 mm

Number of mounting holes: 4

Depth (flange to rear): 93.95 mm

Net weight: 2.0 kg

Ordering codes:

4 ohm version: N/A

8 ohm version: CX6-140FX4-361B

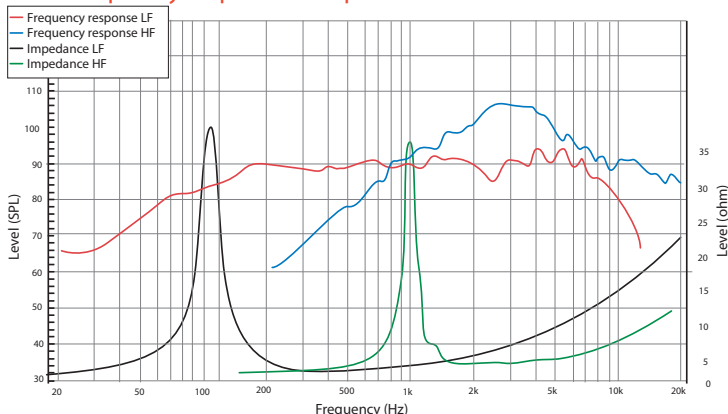
16 ohm version: N/A

Recone kits:

: RCCX-140FX4-361B-C

: RCCX-140FX4-361B-D

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing

