



Code: DR-6-004-4R-B2-C0001

REDCATT 61FHM-1 6-inch ferrite professional mid-woofer: 60 W AES, 86 dB sensitivity, 4 Ω , Fs 35 Hz, 38 mm voice coil. Full T/S parameters, datasheet, 2D drawing and STEP CAD file.

KEY FEATURES

- ✓ EXTENDED FREQUENCY RESPONSE
- ✓ Hard anodized aluminum cone, aluminum basket
- ✓ Designed for hi-fi and outdoor applications

QUICK SPECS

Impedance
4 Ω

Program Power
120 W

Sensitivity
86.01 dB

Fs
35.00 Hz

Magnet
Ferrite

Voice Coil
38 mm

 Datasheet (PDF)

 2D Drawing

 3D Model (STEP)

Design Notes

61FHM mid-woofer was designed for outdoor applications, yet it will shine in hi-fi home and studio applications as well.

Optimized ferrite based magnetic circuit with good air-venting features ensures long lasting performance.

Our engineers have chosen hard-anodized cone with rubber surround for this model. Both of these components are produced with UV stabilizers. Furthermore, REDCATT state of the art adhesives and dispensing techniques ensures waterproof seals in all

with UV exposure, salt exposure and waterproofing.

The extended mid-frequency response allows the systems to be used with higher resonance frequency HF units. For the best performance in the audio systems, we recommend usage in sealed enclosures. In this model the aluminum cone further improves the mid-frequency response and lowers the harmonic distortion artifacts.

Specifications

GENERAL SPECS

Nominal Diameter	6"
Rated Impedance	4 Ohm
Magnet	Ferrite
Basket Material	Aluminum

POWER HANDLING

AES Power	60 W
Continuous Power	120 W
Peak Power	240 W

VOICE COIL

Diameter	38 mm
Winding Wire	CCAW
Former	Glass Fiber
Winding Height	17.8 mm

Resonant Frequency (Hz)	55.55 Hz
Re	3.40 Ω
Qes	0.550
Qms	14.70
Qts	0.530
Vas	28.60 liters
Sd	132.70 cm ²
Mms	18.40 grams
Rms	0.23
Cms	1.1300
Bl	5.01 T·m
Le	0.100 mH
Sensitivity	86.01 dB

General Material

RED

Cone/Dome Material	Aluminum
Spider	Nomex
T-Plate	5 mm
Xmax (peak)	6.4 mm
Xmech	11.4 mm
Overall Diameter	181.50 mm
Bolt Circle Diameter	169.50 mm
Baffle Cutout Dia.	151.00 mm
Mounting Holes	6
Depth (flange to rear)	78.60 mm
Net Weight	1.61 kg

ORDERING CODES

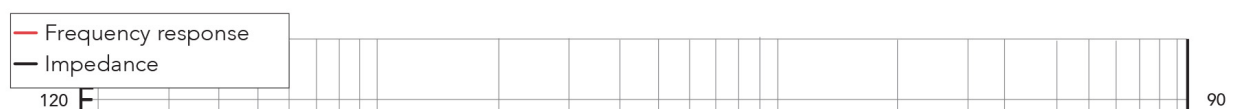
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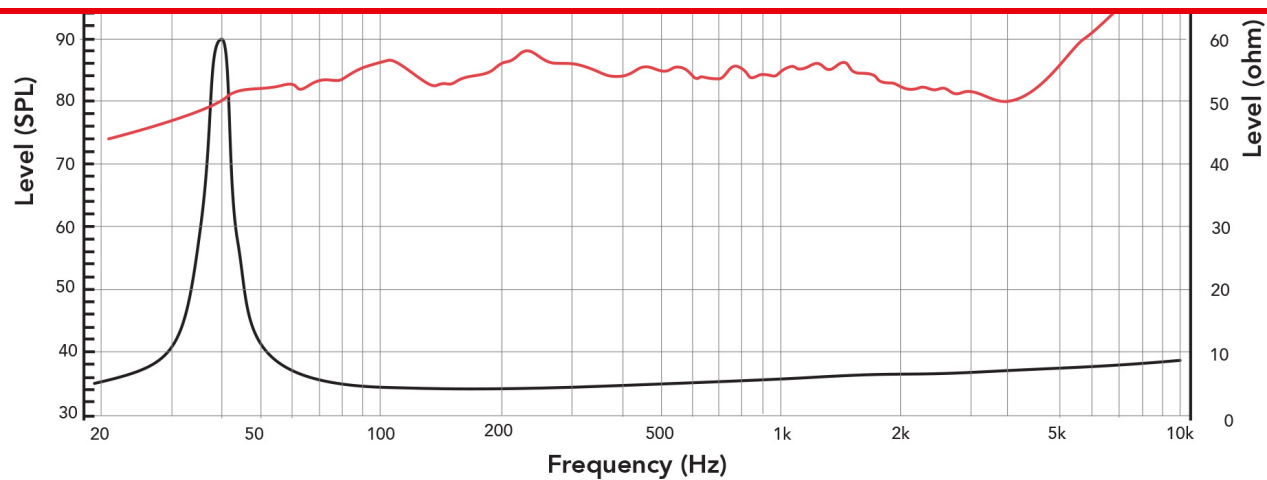
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 Datasheet (PDF)
  2D Drawing (PDF)
  3D Model (STEP)

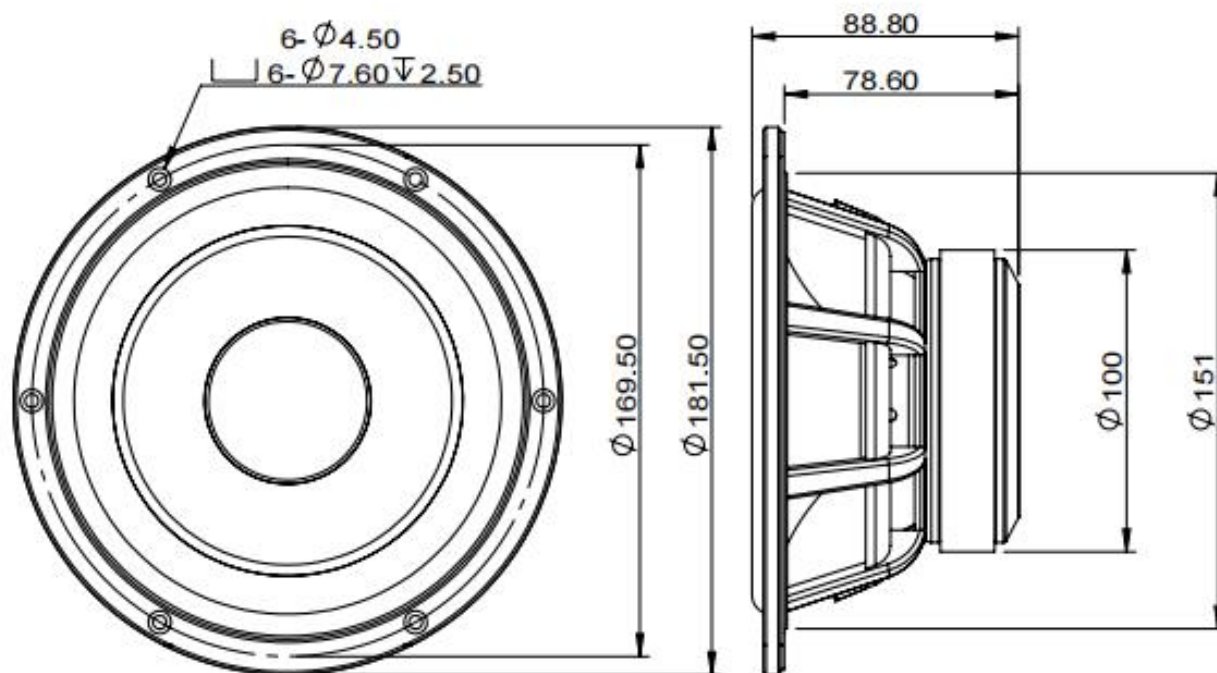
Covered by the REDCATT **3-year Limited Warranty**.

Frequency Response & Impedance





2D Drawing



systems, home theater, in-wall and under-seat installations, and similar domestic or automotive applications. It operates at 86.0 dB sensitivity (1W/1m). The driver features a compliant suspension design suited to moderate-volume enclosures with extended low-frequency response.

The driver is intended for use with moderate amplification (approx. 60 W AES / 120 W continuous) and DSP control. A high-pass filter in the range of 21-32 Hz is recommended depending on enclosure tuning, along with proper limiting to manage thermal and mechanical stress. Typical operating bandwidth is 28-100 Hz, suitable for integration with a mid-bass or full-range driver in a two-way system.

This design is particularly effective in single or multi-driver bass reflex systems used in hi-fi two-way and compact speaker systems, home theater, in-wall and in-ceiling installations, and automotive applications, where extended low-frequency response, wide operating bandwidth, and compact form factor are the primary design priorities.

Recommended enclosure volumes are simulated results. For best enclosure volumes and tuning, we recommend secondary simulation and careful evaluation. Several rounds of samples and fine-tuning may be required for optimal results.

Enclosure Recommendations

Recommended enclosure alignments (bass reflex):

- 8 liters tuned to 40 Hz: high output, strong mid-bass, reduced excursion; -3 dB approx. 37 Hz, HP filter 32 Hz
- 10 liters tuned to 37 Hz: balanced response, general-purpose (recommended); -3 dB approx. 34 Hz, HP filter 27 Hz
- 10 liters tuned to 33 Hz: extended low-frequency, requires HP filter protection; -3 dB approx. 28 Hz, HP filter 21 Hz

Frequently Asked Questions

What enclosure is recommended for the 61FHM-1?



What applications is the 61FHM-1 suited for?



What are the power and sensitivity specs of the 61FHM-1?



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CONTACT

✉ info@redcatt.net

☎ (+86) 769 8318 1898

📍 Dongguan, China