



Code: DR-6.5-001-4R-B2-C0001

REDCATT 61FHM-2 6.5-inch ferrite professional mid-woofer: 50 W AES, 86 dB sensitivity, 4 Ω , Fs 44 Hz, 25.4 mm voice coil. Full T/S parameters, datasheet, 2D drawing and STEP CAD file.

KEY FEATURES

EXTENDED FREQUENCY RESPONSE

QUICK SPECS

Impedance
4 Ω

Program Power
100 W

Sensitivity
86.03 dB

Fs
44.00 Hz

Magnet
Ferrite

Voice Coil
25.4 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 polypropylene 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 weather exposed glue joints. Sealing to the exposure can be guaranteed by EVA gaskets or based upon a request by Form In Place Gaskets.

The audio system designers can rest assured we have extensively tested this product

recommend usage in vented enclosures.

Specifications

GENERAL SPECS

Nominal Diameter	6.5"
Rated Impedance	4 Ohm
Magnet	Ferrite
Basket Material	Steel

POWER HANDLING

AES Power	50 W
Continuous Power	100 W
Peak Power	200 W

VOICE COIL

Diameter	25.4 mm
Winding Wire	Copper
Former	Aluminum
Winding Height	12.4 mm

Resonant frequency (Hz)	44.00 Hz
Re	3.20 Ω
Qes	0.580
Qms	5.27
Qts	0.520
Vas	14.40 liters
Sd	132.70 cm ²
Mms	23.04 grams
Rms	1.21
Cms	0.5700
Bl	6.02 T·m
Le	0.740 mH
Sensitivity	86.03 dB

General Material

Cone/Dome Material	PP
Spider	Nomex
T-Plate	6 mm
Xmax (peak)	3.2 mm
Xmech	9.2 mm
Overall Diameter	165.50 mm
Bolt Circle Diameter	157.00 mm
Baffle Cutout Dia.	143.00 mm
Mounting Holes	4
Depth (flange to rear)	68.00 mm
Net Weight	1.04 kg

ORDERING CODES

Product Code	DR-6.5-001-4R-B2-C0001
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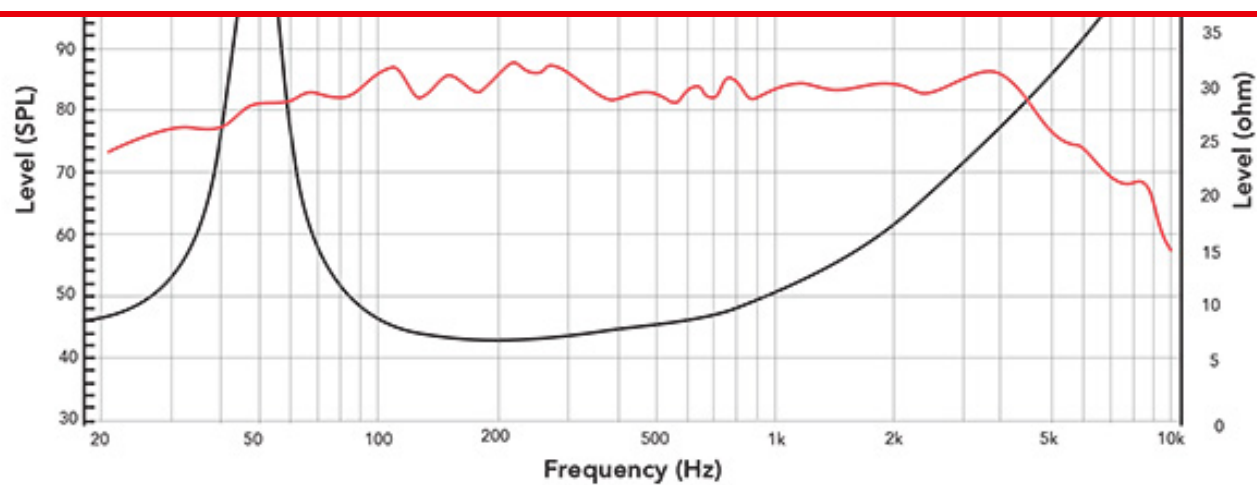
DOWNLOADS

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

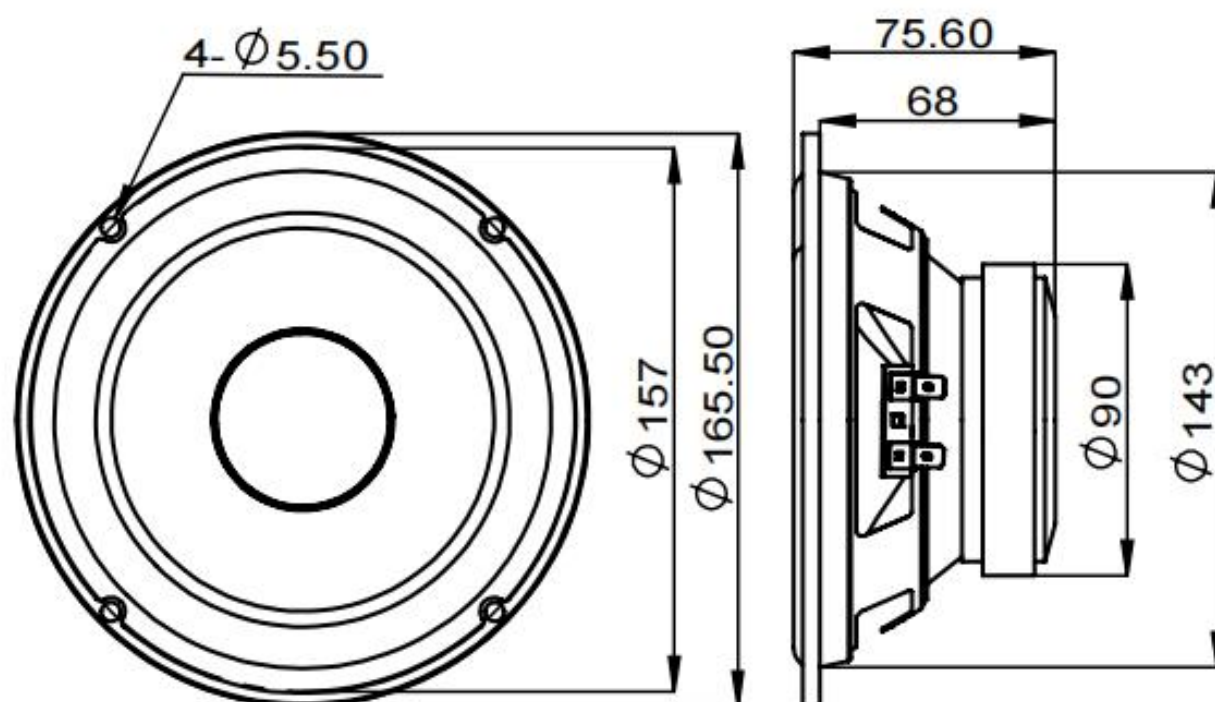
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Frequency Response & Impedance





2D Drawing



continuous) into a nominal 4-ohm load. Sensitivity is 86.0 dB (1 W/1 m). The Qts of 0.52 reflects a balanced motor-suspension design that provides good cone control while maintaining usable output across its operating bandwidth, with vented enclosures recommended for best low-frequency extension. The polypropylene cone with NBR rubber surround is designed for outdoor and weather-exposed applications, with UV-stabilized materials, weatherproofed adhesive joints, and EVA or form-in-place gasket sealing options. The extended mid-frequency response characteristic of this model enables crossover to compression drivers or tweeters at higher frequencies than a standard 6.5-inch mid-woofer.

The driver is rated for approximately 50 W AES (100 W continuous) and is intended for use with amplification typical of compact 2-way professional audio products. A high-pass filter at 45-60 Hz (18-24 dB/octave) is recommended for vented alignments. The extended mid-frequency response supports crossover integration with compression drivers or dome tweeters from approximately 2 to 4 kHz. DSP-controlled active crossovers are preferred in outdoor installation systems where precise system alignment and protection filtering are required.

The 61FHM4-381 is suited for compact 2-way outdoor PA systems, commercial installed sound in weather-exposed locations, portable PA satellite cabinets, and hi-fi applications requiring environmental durability. Good to use with weather-sealed dome tweeters such as 25TFX4-431A, or with 1-inch compression drivers such as 101FCDX8-539A or 101NCDX8-160 in compact 2-way outdoor PA top cabinets.

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 51 Hz: high output, strong mid-bass, reduced excursion; -3 dB approx. 47 Hz, HP filter 43 Hz

Frequently Asked Questions

What are the key features of the 61FHM-2?



What enclosure is recommended for the 61FHM-2?



What applications is the 61FHM-2 suited for?



What are the power and sensitivity specs of the 61FHM-2?



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