

8 inch HIGH POWER MOTIONAL FEEDBACK LOUDSPEAKER

APPLICATION

For application in small enclosures with very low bass response down to 20 Hz with excellent distortion suppression.

The loudspeaker has a built-in acceleration sensor.

Rated frequency range 25 to 1000 Hz.

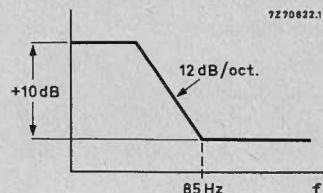
TECHNICAL DATA

Rated impedance	4 Ω
Voice coil resistance	4 Ω
Resonance frequency	38 Hz
Power handling capacity, measured with filter *) mounted in 9 l sealed enclosure	50 W
Operating power	11 W
Sweep voltage frequency range: 35-1000 Hz	5 V
Energy in air gap	225 mJ
Flux density	0,69 T
Air-gap height	5 mm
Voice coil height	12,7 mm
Core diameter	34 mm
Magnet material	FXD
diameter	90 mm
mass	0,42 kg
Mass of loudspeaker	1,3 kg

The loudspeaker has a paper cone and rubber surround.

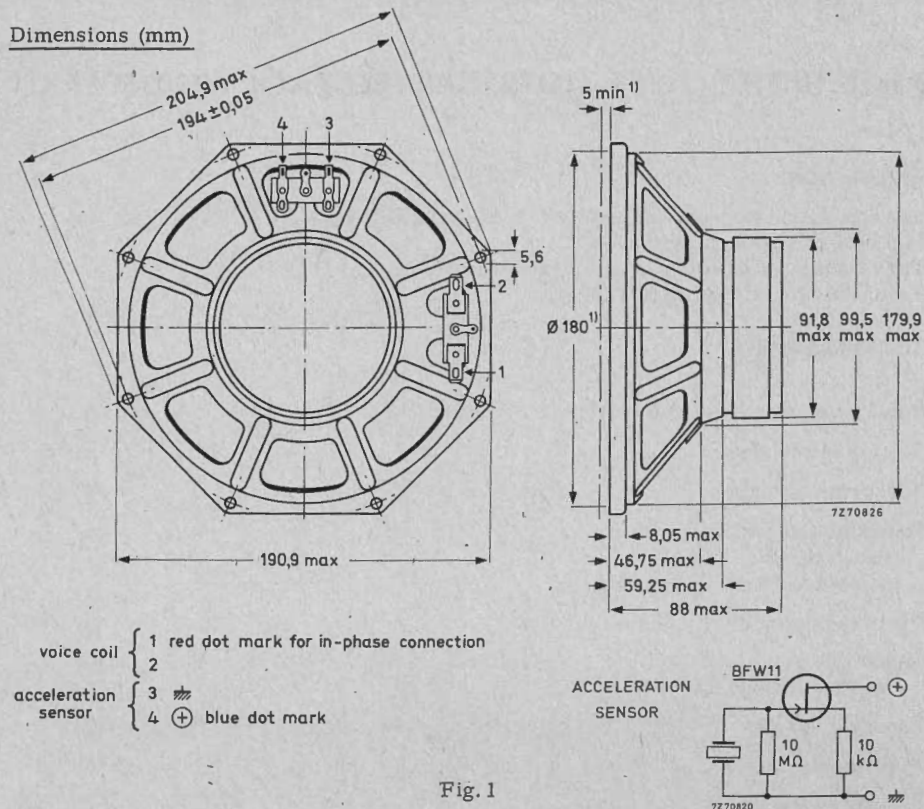
Connection to the loudspeaker by means of soldering or Fastons: voice coil 6,3 mm (0,25 inch); acceleration sensor: 3,2 mm (0,12 inch).

*) Filter characteristic :



AD8067/MFB

8 inch HIGH POWER MOTIONAL
FEEDBACK LOUDSPEAKER



1) Baffle hole and mounting clearance depth required for cone movement at the specified power handling capacity.

AVAILABLE VERSION

AD8067/MFB, catalogue number 2422 257 386.5

(0) = stamped on loudspeaker magnet,
not to be used for ordering

2 = for bulk packing *)

6 = for single unit packing

FREQUENCY RESPONSE CURVES (see Fig. 2)

Curve b: Sound pressure measured in anechoic room at an operating power of 11 W.
Loudspeaker mounted in sealed 80 l enclosure, filled with 1 kg of glass wool.

Curve c: 2nd and 3rd harmonic distortion, measured at the operating power of 11 W in anechoic room, loudspeaker mounted in sealed 80 l enclosure, filled with 1 kg of glass wool.

*) Minimum packing quantity 3 per unit.

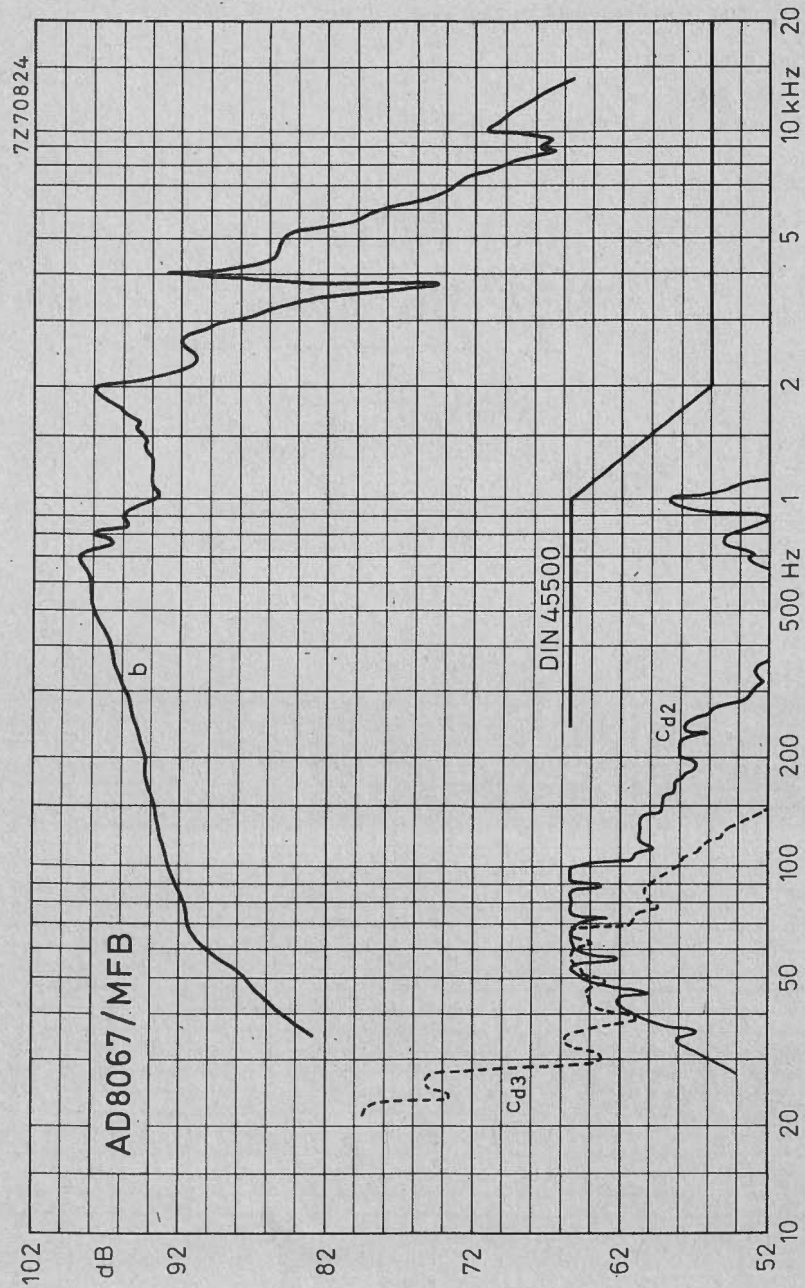


Fig. 2

COIL ACCELERATION RESPONSE CURVE (see Fig. 4)

Test conditions :

Loudspeaker unmounted.

Input at voice coil connections : 0,44 V (50 mW /4 Ω)

Test circuit

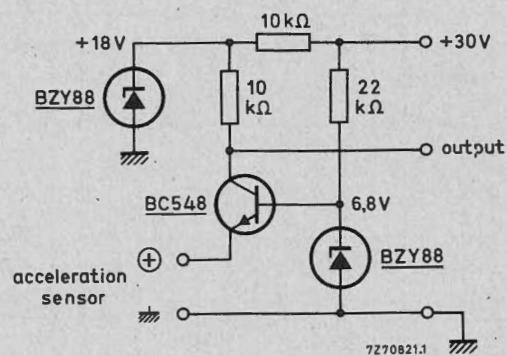


Fig. 3

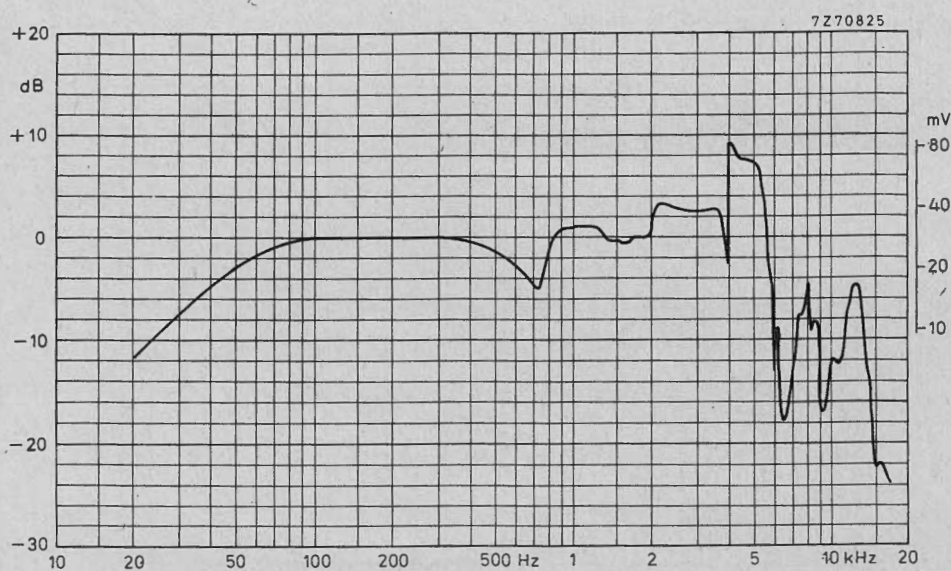


Fig. 4

Phase relation between output voltage of acceleration sensor and input voltage on voice coil

- : V_{out} lagging

+ : V_{out} leading

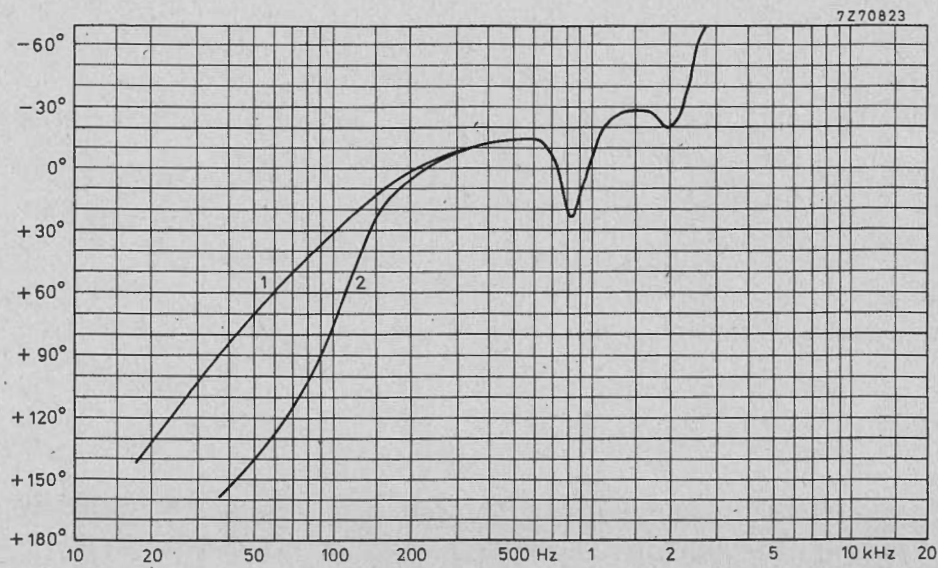


Fig. 5

Curve 1: loudspeaker unmounted; $f_{res} = 26$ Hz.

Curve 2: loudspeaker mounted in sealed 9 l enclosure; $f_{res} = 84$ Hz.