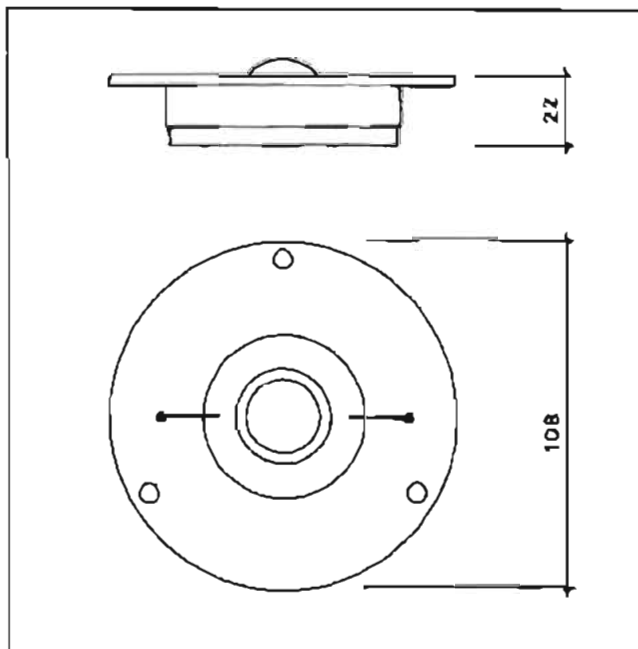


Model T27

Specification Number SP1032

Mellnex dome high frequency unit with extended frequency response and wide dispersion.



Net weight: 0.65 kg (1.43 lb)

Nominal impedance: 8Ω

Nominal frequency range: 1,000-40,000 Hz (see note 5)

Power handling:

Continuous sine wave 8 V RMS (see note 1)

Programme 100 W (see note 2)

Magnet:

Flux density 1.2 T (12,000 gauss)

Total flux 2.15×10^{-3} Wb (21,500 Maxwells)

Sensitivity: Output, for 1 W pink noise input, at 1 metre on axis 80 dB SPL

Voice coil:

Diameter 20 mm ($\frac{3}{4}$ in)

Inductance 50μH

Max continuous service temperature (30 min) 130°C

Max Intermittent temperature (5 sec) 220°C

Thermal time constant 3.5 seconds

Thermal resistivity (temp rise per applied Watt) 19.8°C/W

Nominal DC Resistance, R_{DC} 6.25Ω (tolerance $\pm 10\%$)

Typical production spread $6.1 \pm 0.24\Omega$ (see note 3)

Minimum impedance (In nominal frequency range) 7.1Ω at 2,300 Hz

Diaphragm:

Effective area, S_D 4.52 cm² (0.7 sq in)

Effective moving mass, M_D 0.37 gm

Free air resonance frequency, f_0 :

Nominal 1,200 Hz (tolerance ± 200 Hz)

Typical production spread $1,200 \pm 120$ Hz (see note 3)

Total mechanical resistance of suspension, R_{MS} :

0.7 mech Ω

Suspension compliance, C_{MS} : 5×10^{-6} m/N
(5×10^{-8} cm/dyne)

Force factor, Bl: 3.0 N/A

Damping:

Mechanical Q_M 4.0

Electrical Q_E 1.6

Total Q_T 1.1 (see note 4)

Notes

1 Continuous Power Rating (Pc).

$$P_c = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion. (See Note 5)

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$Q_M = \frac{2\pi f_0 M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_0 M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

5 Minimum crossover frequency 3,000 Hz, filter cut-off slope at least 18 dB per octave.

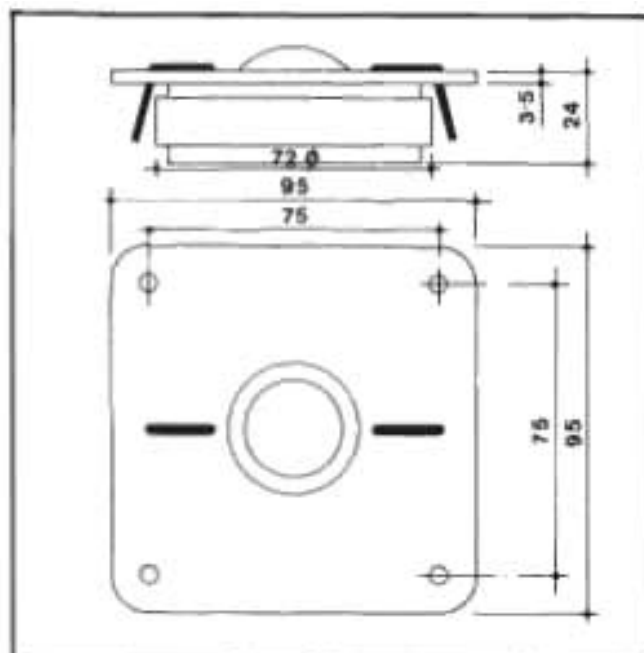
DATA SHEET

KEF

T33·A

Specification Number SP1074

Dome high frequency unit with extended frequency response and wide dispersion.



Net weight: 0.55 kg

Nominal impedance: 8 ohms

Nominal frequency range: 3,000-20,000 Hz (see note 3)

Power handling:

Continuous sine wave 9 V RMS (see note 1)

Programme 100 W (see note 2)

Magnet:

Flux density 1.2 T (12,000 gauss)

Total flux 2.9×10^{-4} Wb (29,000 Maxwells)

Voice Coil:

Diameter 25.4 mm

Max continuous service temperature (30 min) 120°C

Max intermittent temperature (5 sec) 200°C

Thermal time constant 3.5 seconds

Nominal DC Resistance, R_{DC} (tolerance 5.6-6.4 ohms)

Minimum impedance (in normal frequency range)
7.1 ohms at 3,000 Hz

Diaphragm:

Effective area, S_D 6.29 cm²

Effective moving mass, M_D 0.36 g

Free air resonance frequency, f_s :

Nominal 950 Hz \pm 200 Hz

Total mechanical resistance of suspension, R_{MS} :
0.5 mech ohms

Suspension compliance, C_{MS} : 7.8×10^{-4} mN⁻¹

Force factor, Bl : 3.5 NA⁻¹

Damping:

Mechanical Q_M 4.39

Electrical Q_E 1.04

Total Q_T 0.84 (see note 4)

Notes

1 Continuous Power Rating (P_c).

$$P_c = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$4 \quad Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

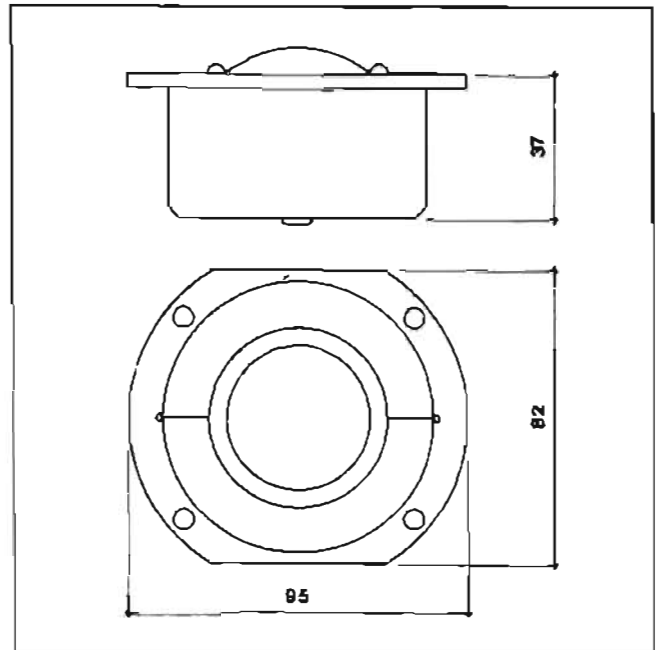
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PL343 EN01

Model T52 Specification Number SP1049

Melinox dome high frequency unit with extended frequency response and wide dispersion.



Net weight: 0.73 kg (1.6 lb)

Nominal impedance: 8Ω

Nominal frequency range: 800-20,000 Hz (see note 5)

Power handling:

Continuous sine wave 10 V RMS (see note 1)

Programme 100 W (see note 2)

Magnet:

Flux density 1.0 T (10,000 gauss)

Total flux 5.0×10^{-4} Wb (50,000 Maxwells)

Sensitivity: Output, for 1 W pink noise input, at
1 metre on axis 84 dB SPL

Voice coil:

Diameter 39mm (1.5 in)

Inductance 85 μH

Max continuous service temperature (30 min) 130°C

Max Intermittent temperature (5 sec) 220°C

Thermal time constant 3.5 seconds

Thermal resistivity (temp rise per applied Watt) 4.0°C/W

Nominal DC Resistance, R_{DC} 6.6Ω (tolerance ± 5%)

Typical production spread $6.7 \pm 0.2\Omega$ (see note 3)

Minimum impedance (In nominal frequency range)
7.8Ω at 2,360 Hz

Diaphragm:

Effective area, S_D 16.6 cm² (2.6 sq in)

Effective moving mass, M_D 0.92 gm

Free air resonance frequency, f_s :

Nominal 650 Hz (tolerance ± 70 Hz)

Typical production spread 620 ± 20 Hz (see note 3)

Total mechanical resistance of suspension, R_{MS} :
1.2 mech Ω

Suspension compliance, C_{MS} : 8.2×10^{-5} m/N
 8.2×10^{-6} cm/dyne)

Force factor, Bl : 4.5 N/A

Damping:

Mechanical Q_M 2.8

Electrical Q_E 1.59

Total Q_T 1.01 (see note 4)

Notes

1 Continuous Power Rating (P_c).

$$P_c = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion. (See Note 5)

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2/R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

5 Minimum crossover frequency 3,000 Hz, filter cut-off slope at least 18 dB per octave.



DATA SHEET

KEF

B110·A

Specification Number SP1003

Compact, long throw bass/mid range unit, suitable for use in either a compact full range system, or as a specialised mid range unit in a multi-way system

Net weight: 1.13 kg (2.5 lb)

Nominal impedance: 8Ω

Nominal frequency range: 55-3,500 Hz

Typical enclosure volumes:

Totally enclosed box 5-10 litres (0.2-0.4 cu ft)

MF enclosure 4 litres (0.15 cu ft)

Power handling:

Continuous sine wave 15 V RMS (see note 1)

Programme full range 30 W (see note 2)

Programme mid range only 80 W (see note 2)

Magnet:

Flux density 1.0 T (11,000 gauss)

Total flux 5.8×10^{-4} Wb (58,000 Maxwells)

Sensitivity: Pink noise input for 96 dB SPL at 1 metre on axis 12.5 V RMS

Voice coil:

Diameter 26 mm (1 in)

Inductance 0.45 mH

Max continuous service temperature (30 min) 180°C

Max intermittent temperature (5 sec) 250°C

Thermal time constant 4 seconds

Thermal resistivity (temp rise per applied Watt) 7°C/W

Nominal DC Resistance, R_{DC} 7.1Ω (tolerance ±10%)

Typical production spread $6.7 \pm 0.2\Omega$ (see note 3)

Minimum impedance (in nominal frequency range) 7.8Ω at 280 Hz

Diaphragm:

Effective area, S_D 92 cm² (14 sq in)

Effective moving mass, M_D 10.5 gm (0.37 oz)

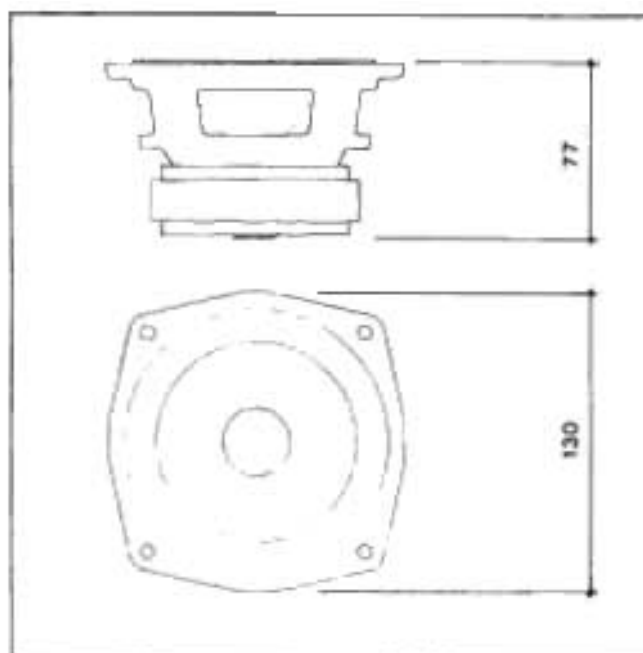
Max linear excursion, X_D 6 mm peak-peak (½ in)

Max damage limited excursion 12 mm peak-peak (½ in)

Free air resonance frequency, f_s :

Nominal 35 Hz (tolerance ±5 Hz)

Typical production spread 38.0 ± 2.0 Hz (see note 3)



Total mechanical resistance of suspension, R_{MS} :
0.34 mech Ω

Suspension compliance, C_{MS} : 2.0×10^{-3} m/N
(2.0×10^{-4} cm/dyne)

Equivalent volume of compliance, V_{AS} : 23.6 litres
(1,440 cu in)

Force factor, Bl : 7.1 N/A

Damping:

Mechanical Q_M 6.7

Electrical Q_E 0.33

Total Q , 0.31 (see note 4)

Notes

1 Continuous Power Rating (P_C)

$$P_C = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$Q_{MS} = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_1} + \frac{1}{Q_M} + \frac{1}{Q_E}$$

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PL345 EN01

KEF DATA SHEET

B110·B

Specification Number SP1057

Compact, long throw bass/mid range unit, suitable for use in either a compact full range system, or as a specialised mid range unit in a multi-way system.

Net weight: 1.13 kg (2.5 lb)

Nominal impedance: 8Ω

Nominal frequency range: 55-3,500 Hz

Typical enclosure volumes:

Totally enclosed box 5-10 litres (0.2-0.4 cu ft)

MF enclosure 4 litres (0.15 cu ft)

Power handling:

Continuous sine wave 28 V RMS (see note 1)

Programme full range 50 W (see note 2)

Programme mid range only 150 W (see note 2)

Magnet:

Flux density 1.0 T (11,000 gauss)

Total flux 5.8×10^4 Wb (58,000 Maxwells)

Sensitivity: Pink noise input for 96 dB SPL at 1 metre on axis 11.2 V RMS

Voice coil:

Diameter 26 mm (1 in)

Inductance 0.45 mH

Max continuous service temperature (30 min) 250°C

Max intermittent temperature (5 sec) 340°C

Thermal time constant 11 seconds

Thermal resistivity (temp rise per applied Watt) 6.2°C/W

Nominal DC Resistance, R_{DC} 7.1Ω (tolerance $\pm 10\%$)

Typical production spread $6.7 \pm 0.2\Omega$ (see note 3)

Minimum impedance (in nominal frequency range) 7.8Ω at 280 Hz

Diaphragm:

Effective area, S_D 92 cm² (14 sq in)

Effective moving mass, M_D 9.8 gm

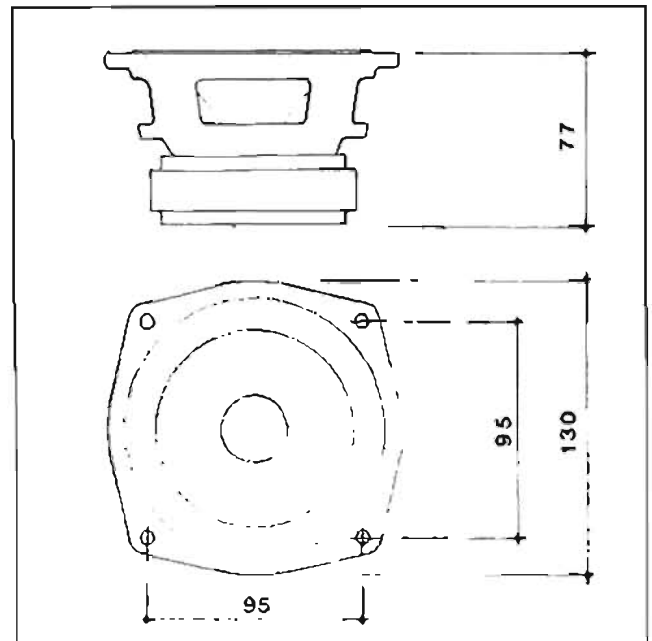
Max linear excursion, X_D 6 mm peak-peak ($\frac{1}{2}$ in)

Max damage limited excursion 12 mm peak-peak ($\frac{1}{2}$ in)

Free air resonance frequency, f_s :

Nominal 37 Hz (tolerance ± 5 Hz)

Typical production spread 38.0 ± 2.0 Hz (see note 3)



Total mechanical resistance of suspension, R_{MS} :
1.0 mech Ω

Suspension compliance, C_{MS} : 1.8×10^{-3} m/N
(1.8×10^{-6} cm/dyne)

Equivalent volume of compliance, V_{AS} : 23.6 litres
(1.440 cu in)

Force factor, BI: 7.1 N/A

Damping:

Mechanical Q_M 2.44

Electrical Q_E 0.38

Total Q , 0.33 (see note 4)

Notes

1 Continuous Power Rating (P_c).

$$P_c = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_T = \frac{2\pi f_s M_D}{(BI)^2/R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_C}$$

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PL346 EN01

B139-B

Specification Number SP1044

Low frequency unit with foil-stressed expanded plastic diaphragm and highly compliant surround, suitable for totally enclosed box, reflex, transmission line, horn and other specialised low frequency applications.

Net weight: 3.85 kg (8.56 lb)

Nominal impedance: 8Ω

Nominal frequency range: 20-10000 Hz

Typical enclosure volumes:

Totally enclosed box 30-40 litres (1-2 cu ft)

Reflex 60-140 litres (2-5 cu ft)

Power handling:

Continuous sine wave 20 V RMS (see note 1)

Programme 100 W (see note 2)

Magnet:

Flux density 0.85 T (8,500 gauss)

Total flux 1.11×10^{-3} Wb (111,000 Maxwells)

Sensitivity: Pink noise input for 96 dB SPL at 1 metre on axis 11 V RMS

Voice coil:

Diameter 55 mm (2 in)

Inductance 0.56 mH

Max continuous service temperature (30 min) 180°C

Max intermittent temperature (5 sec) 250°C

Thermal time constant 16 seconds

Thermal resistivity (temp rise per applied Watt) $4.5^{\circ}\text{C}/\text{W}$

Nominal DC Resistance, R_{DC} 6.6Ω (tolerance $\pm 10\%$)

Typical production spread $6.2 \pm 0.14\Omega$ (see note 3)

Minimum impedance (in nominal frequency range) 6.7Ω at 160 Hz

Diaphragm:

Effective area, S_D 354 cm² (55 sq in)

Effective moving mass, M_D 43.5 gm (1.53 oz)

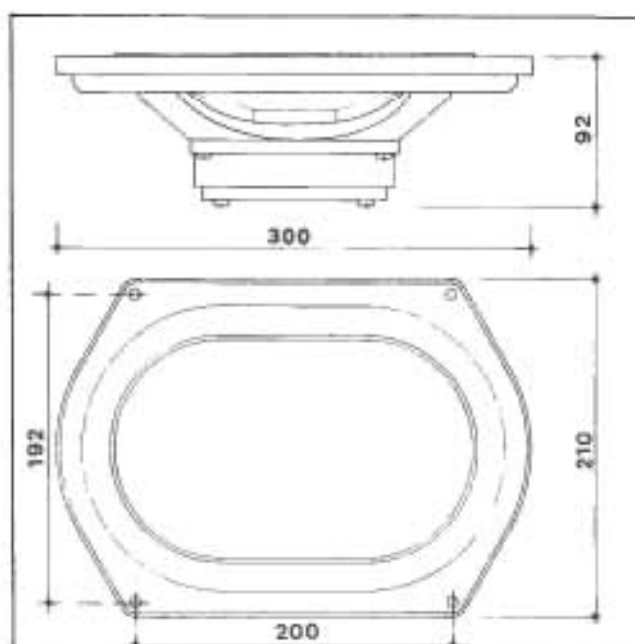
Max linear excursion, X_D 6 mm peak-peak ($\frac{1}{4}$ in)

Max damage limited excursion 12 mm peak-peak ($\frac{1}{2}$ in)

Free air resonance frequency, f_s :

Nominal 25.0 Hz (tolerance ± 5 Hz)

Typical production spread 25.0 ± 2.4 Hz (see note 3)



Total mechanical resistance of suspension, R_{MS} :

1.24 mech Ω

Suspension compliance, C_{MS} : 9.3×10^{-4} m/N

(9.3×10^{-7} cm/dyne)

Equivalent volume of compliance, V_{AS} : 164 litres

(9,990 cu in)

Force factor, Bl : 12.3 N/A

Damping:

Mechanical Q_M 5.5

Electrical Q_E 0.4

Total Q , 0.37 (see note 4)

Notes

1 Continuous Power Rating (PC).

$$P_C = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

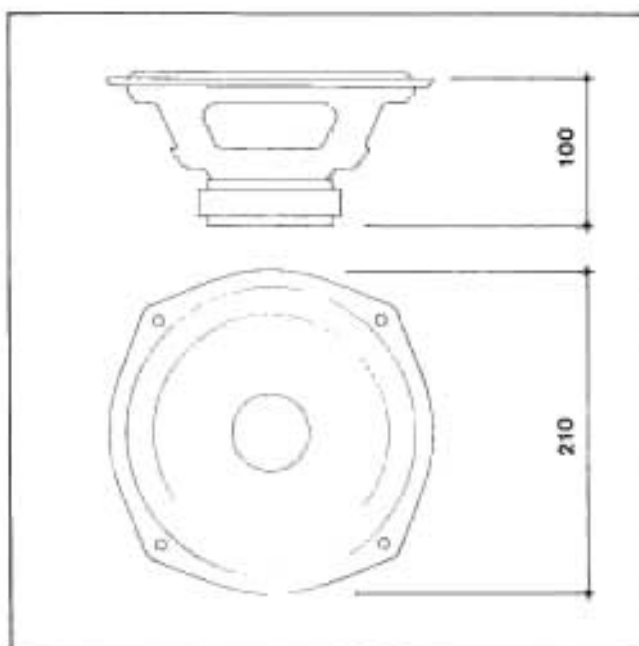
3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

KEF DATA SHEET

B200·A Specification Number SP1014

Low/mid range unit with rubber modified polystyrene diaphragm, highly compliant suspension, and long throw voice coil assembly. Suitable for use with totally enclosed boxes.



Net weight: 1.47 kg (3.24 lb)

Nominal impedance: 8Ω

Nominal frequency range: 25-3,500 Hz

Typical enclosure volumes: Totally enclosed baffle
20-30 litres (½-1 cu ft)

Power handling:

Continuous sine wave 15 V RMS (see note 1)

Programme 50 W (see note 2)

Magnet:

Flux density 1.1 T (11,000 gauss)

Total flux 5.8×10^{-4} Wb (58,000 Maxwells)

Sensitivity: Pink noise input for 96 dB SPL at
1 metre on axis 10 V RMS

Voice coil:

Diameter 26 mm (1 in)

Inductance 0.42 mH

Max continuous service temperature (30 min) 180°C

Max intermittent temperature (5 sec) 250°C

Thermal time constant 4 seconds

Thermal resistivity (temp rise per applied Watt) 7°C/W

Nominal DC Resistance, R_{DC} 7.1Ω (tolerance $\pm 10\%$)

Typical production spread $6.7 \pm 0.2\Omega$ (see note 3)

Minimum impedance (in nominal frequency range)
7.4Ω at 160 Hz

Diaphragm:

Effective area, S_D 232 cm² (36 sq in)

Effective moving mass, M_D 24.0 gm (0.84 oz)

Max linear excursion, X_D 6 mm peak-peak (¼ in)

Max damage limited excursion 12 mm peak-peak (½ in)

Free air resonance frequency, f_s :

Nominal 25 Hz (tolerance ± 5 Hz)

Typical production spread 24.7 ± 1.0 Hz (see note 3)

Total mechanical resistance of suspension, R_{MS} :

0.8 mech Ω

Suspension compliance, C_{MS} : 1.78×10^{-3} m/N

(1.78×10^{-8} cm/dyne)

Equivalent volume of compliance, V_{AS} : 131.5 litres

(8,000 cu in)

Force factor, Bl : 7.1 N/A

Damping:

Mechanical Q_M 4.7

Electrical Q_E 0.57

Total Q_T 0.51 (see note 4)

Notes

1 Continuous Power Rating (P_C).

$$P_C = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$4 \quad Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

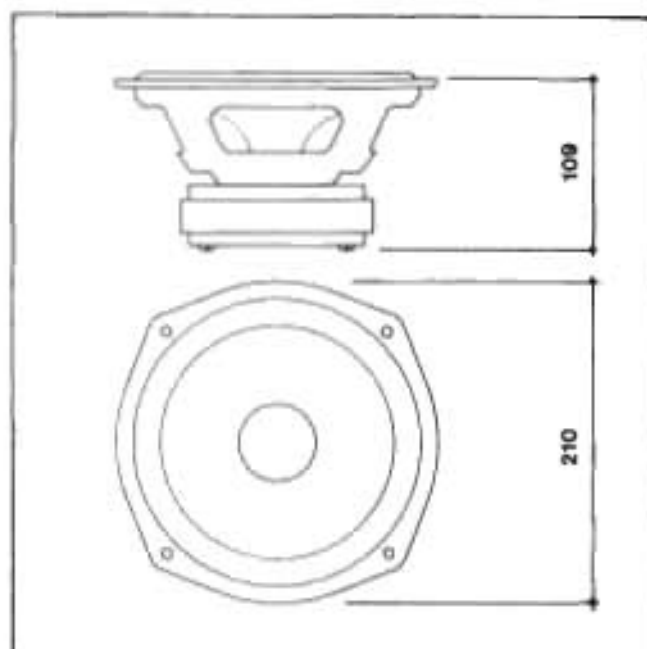
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PL347 EN01

Model B200 Specification Number SP1054

Low/mid range unit with visco-elastic damped Bextrene diaphragm and high temperature coil assembly, suitable for use where low distortion and high power handling are required.



Net weight: 2.72 kg (6 lb)

Nominal impedance: 8Ω

Nominal frequency range: 25-3,500 Hz

Typical enclosure volumes:

Totally enclosed box 20-25 litres (¾-1 cu ft)

Reflex 40-50 litres (1-1½ cu ft)

Power handling:

Continuous sine wave 28 V RMS (see note 1)

Programme 100 W (see note 2)

Magnet:

Flux density 1.35 T (13,500 gauss)

Total flux 0.87×10^{-4} Wb (87,700 Maxwells)

Sensitivity: Pink noise input for 96 dB SPL at
1 metre on axis 6.4 V RMS

Voice coil:

Diameter 32.6 mm (1¼ in)

Inductance 0.45 mH

Max continuous service temperature (30 min) 250°C

Max intermittent temperature (5 sec) 340°C

Thermal time constant 12.5 seconds

Thermal resistivity (temp rise per applied Watt) 6°C/W

Nominal DC Resistance, R_{DC} 7.0Ω (tolerance ±5%)

Typical production spread $6.9 \pm 0.1\Omega$ (see note 3)

Minimum impedance (in nominal frequency range)
7.1Ω at 190 Hz

Diaphragm:

Effective area, S_D 232 cm² (36 sq in)

Effective moving mass, M_D 21.3 gm

Max linear excursion, X_D 6 mm peak-peak (0.25 in)

Max damage limited excursion 20 mm peak-peak (0.8 in)

Free air resonance frequency, f_s :

Nominal 25 Hz (tolerance ±5 Hz)

Typical production spread 24 ± 2.2 Hz (see note 3)

Total mechanical resistance of suspension, R_{MS} :
0.7 mech Ω

Suspension compliance, C_{MS} : 2.2×10^{-4} m/N
(2.2×10^{-8} cm/dyne)

Equivalent volume of compliance, V_{AS} : 130 litres
(7,930 cu in)

Force factor, Bl: 10.4 N/A

Damping:

Mechanical Q_M 3.27

Electrical Q_E 0.25

Total Q_T 0.23 (see note 4)

Notes

1 Continuous Power Rating (P_C).

$$P_C = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

3 "Typical production spread" is derived from statistical analysis of a large number of units, and is calculated to include 95% of all units.

$$4 \quad Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

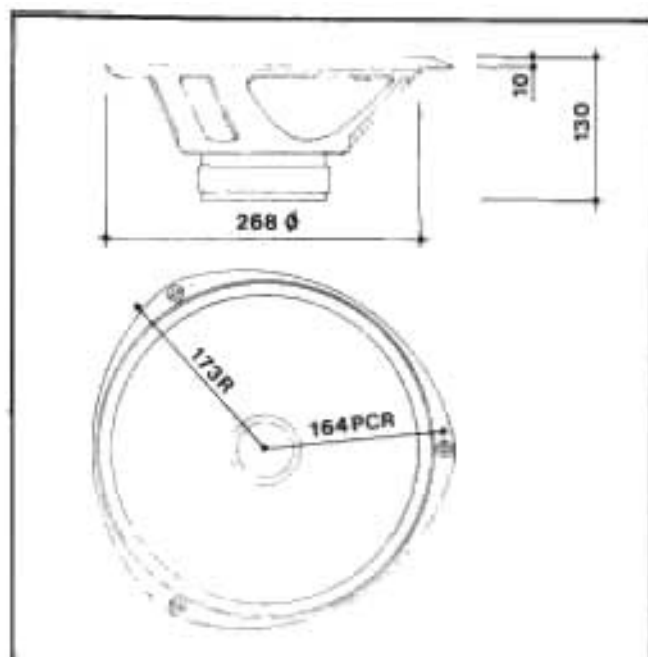


DATA SHEET

B300-B

Specification Number SP1071

Low frequency unit with visco-elastic damped Bextrene diaphragm and high temperature coil assembly, suitable for use where low distortion and high power handling are required.



Net weight: 3.75 kg (8 lb 4 oz)

Nominal impedance: 8 ohms

Nominal frequency range: 25-2,000 Hz

Typical enclosure volumes:

Totally enclosed box 65-75 litres

Reflex 80-130 litres

Power handling:

Continuous sine wave 35 V RMS (see note 1)

Programme 200 W (see note 2)

Magnet:

Flux density 1.02 T (10,200 gauss)

Total flux 1.08 mWb (108 k Maxwells)

Voice coil:

Nominal diameter 52 mm

Nominal DC resistance, R_{DC} 6.9 ohms (tolerance $\pm 5\%$)

Minimum impedance 7.8 ohms at 120 Hz (in nominal frequency range)

Max continuous service temperature (30 min) 250°C

Max intermittent temperature (5 sec) 340°C

Diaphragm:

Effective area, S_D 520 cm²

Effective moving mass, M_D 73 gm

Max linear excursion, X_D 12 mm peak-peak

Max damage-limited excursion 25 mm peak-peak

Free air resonance frequency, f_s :

Nominal 23 Hz (tolerance ± 5 Hz)

Total mechanical resistance of suspension, R_{MS} :

2.0 mech ohms

Suspension compliance, C_{MS} : 6.6×10^{-4} m/N

Equivalent volume of compliance, V_{AS} : 130 litres

Force factor, Bl : 12 N/A

Damping:

Mechanical Q_M 5.3

Electrical Q_E 0.50

Total Q_T 0.46 (see note 3)

Notes

1 Continuous Power Rating (P_C).

$$P_C = \frac{V^2}{R}$$

V is the RMS voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.

2 The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

$$3 \quad Q_M = \frac{2\pi f_s M_D}{R_{MS}} \quad Q_E = \frac{2\pi f_s M_D}{(Bl)^2 / R_{DC}} \quad \frac{1}{Q_T} = \frac{1}{Q_M} + \frac{1}{Q_E}$$

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KEF reserve the right to incorporate developments and amend the specification without prior notice, in line with continuous research and product improvement.

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