

Single driver data

Name

of drivers

in series

<input type="checkbox"/> fs [Hz] <input type="text" value="28.973202"/>	<input checked="" type="checkbox"/> BI [N/A] <input type="text" value="30.5"/>
<input checked="" type="checkbox"/> Mms [g] <input type="text" value="355"/>	<input checked="" type="checkbox"/> Re [ohm] <input type="text" value="5.4"/>
<input checked="" type="checkbox"/> Cms [mm/N] <input type="text" value="0.085"/>	<input type="checkbox"/> Qes <input type="text" value="0.37514468"/>
<input type="checkbox"/> Vas [liter] <input type="text" value="348.77379"/>	<input checked="" type="checkbox"/> Rms [Ns/m] <input type="text" value="9.05"/>
<input checked="" type="checkbox"/> Sd [cm²] <input type="text" value="1700"/>	<input type="checkbox"/> Qts <input type="text" value="0.3564204"/>

Le [mH] Le loss (0-1)

Driver limits
 Xmax [mm] Pmax [W]

Save... Load... Download

Equivalent driver data
 Compliance: 0.085 mm/N
 Moving mass: 314.6 g
 Diameter: 465.2 mm, 18.32"
 Qms: 7.141
 Vmax: 2380 ml
 Sensitivity: 97.3 dB

Show kr=1

Added pathway [mm] Delay: 0 µs

Voice coil temp [°C]

Actual Re=5.4 ohm

Reverse polarity

Suggestion

Vb = 270.9 liter

fp = 30.79 Hz

Design formula source

Öhman

Keele

Margolis/Small

Info

This design suggests Vb and fp based on Vas, Viso, fs and Qts

$$Vb = Vas * 15 * Qts^{2.87} / (1 + 0.4 * viso)$$

$$fp = fs * 0.42 / Qts^{0.9}$$

Vent 1

Sp [cm²] fp [Hz]

diameter [mm] Qp

Passive radiator

Vent properties
 Air mass: 0.06114 g
 Effective port length: 91.35 mm
 Actual port length: 6.349 mm
 Vent encloses 0.04986 l of air

of vents Show kr=1

Tube sections Added pathway [mm] Delay: 0 μs

Vent limits

Max peak excursion

Relative to port length [%]

Absolute [mm]

Max velocity [m/s]

