

Jed Margolin - Monster Subwoofer 1/2" particle board

Alpine SWE-1043

	25 cm
Fs(Hz)	31
Qms	10.48
Qes	0.66
Qts	0.62
Vas	1.16 cu ft
	33 liters

<http://www.mh-audio.nl/ReflexBoxCalculator.asp>

Dia :	<input type="text" value="22"/>	cm	Diameter across the speaker cone including half of the cone-suspension
f _s :	<input type="text" value="31"/>	Hz	Resonant frequency of the driver
Q _{ms} :	<input type="text" value="10.48"/>		Q mechanical - needed to calculate Q_{ts}
Q _{es} :	<input type="text" value=".66"/>		Q electrical - needed to calculate Q_{ts}
Q _{ts} :	<input type="text" value=".62"/>		Total Q of the driver <input type="button" value="Calculate Q<sub>ts</sub>"/>
V _{as} :	<input type="text" value="33"/>	liters	Equivalent volume of compliance
<input type="button" value="Calculate V<sub>b</sub>"/>			

V _{dr} :	<input type="text" value="3"/>	liters	Volume of internal driver and parts
V _b :	<input type="text" value="255"/>	liters	Desired volume for the enclosure - you may change the enclosure volume
<input type="button" value="Calculate Dimensions & Performance"/>			

Calculated inside Dimensions		Calculated Performance Specifications	
Width =	<input type="text" value="63.66"/> cm <input type="text" value="25.06"/> inches	F _b =	<input type="text" value="16.11"/> Hz Port alignment frequency
Height =	<input type="text" value="103.01"/> cm <input type="text" value="40.55"/> inches	Peak =	<input type="text" value="-2.07"/> db Peak level
Depth =	<input type="text" value="39.34"/> cm <input type="text" value="15.49"/> inches	F ₋₃ =	<input type="text" value="11.15"/> Hz "Cut-off" frequency at -3db
Volume V _b =	<input type="text" value="258"/> liters <input type="text" value="15744.12"/> in ³		

The bass reflex port should have at least 1/3 of the driver's diameter!

D_p : cm Diameter of port(s) - you may change the port diameter

Port area = cm² in²

Port length(s) = cm inches



