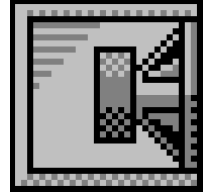


Custom Vented Box Design

By Dr F. Mark Carter, Walberswick Studios



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 6.031 cu.ft

V(total) = 6.818 cu.ft

Fb = 16.24 Hz

QL = 5.907

F3 = 17.44 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = rectangle

Vent ends = two flared

Hv = 2.5 in

Wv = 10 in

Lv = 41.03 in

Driver Properties

--Description--

Name: Shiva-X 12"

Type: Standard one-way driver

Company: Shiva

Underhung voice coil

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 20 Hz

Qms = 3.2

Vas = 125 liters

Cms = 0.38 mm/N

Mms = 171 g

Rms = 6.544 kg/s

Xmax = 27 mm

Xmech = 40.5 mm

P-Dia = 247.5 mm

Sd = 491 sq.cm

P-Vd = 2.65 liters

--Electrical Parameters--

Qes = 0.55

Re = 3.65 ohms

Le = 0.9 mH

Z = 4 ohms

BL = 11.9 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.47

no = 0.175 %

1-W SPL = 84.4 dB

2.83-V SPL = 87.99 dB



Wiring Diagram

