

## 2-Way Crossover Network

Low-Pass (LP) Filter: 1 required

Type: 3rd-Order Butterworth

Desired Corner Frequency: 1500 Hz

High-Pass (HP) Filter: 1 required

Type: 3rd-Order Butterworth

Desired Corner Frequency: 2200 Hz

C1 = 8.2  $\mu$ F, Polypropylene, 0.00567 ohms

C2 = 24  $\mu$ F, Polypropylene, 0.00322 ohms

C3 = 47  $\mu$ F, Polypropylene, 0.00236 ohms

L1 = 0.33 mH, Air Core (#20), 0.369 ohms

L2 = 0.47 mH, Air Core (#14), 0.134 ohms

L3 = 0.16 mH, Air Core (#14), 0.072 ohms

## Tweeter

1.56 dB L-Pad

Rp1 = 1 ohms

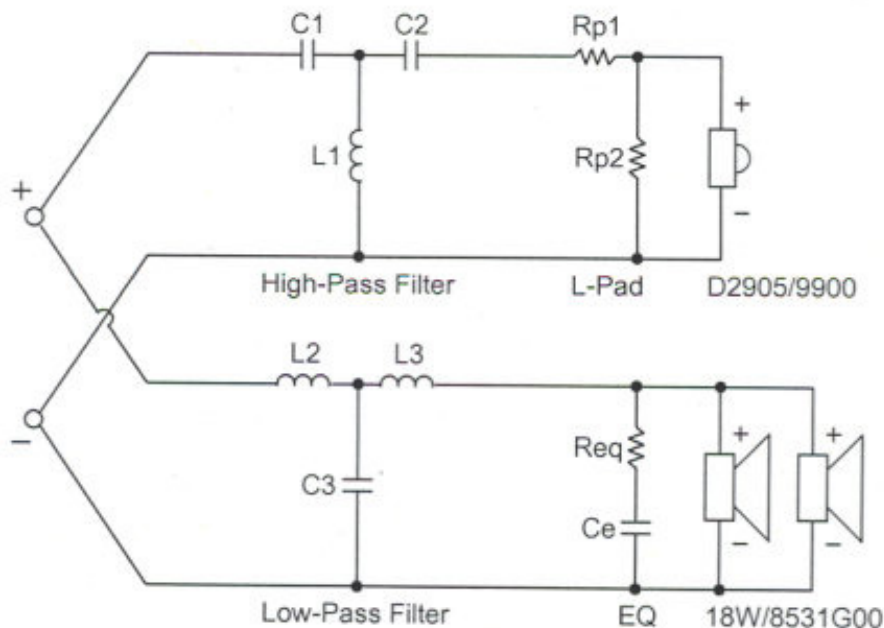
Rp2 = 33 ohms

## Woofer

Impedance EQ

Req = 3.6 ohms

Ce = 22  $\mu$ F



## Loudspeaker Parameters

--General Information--

Company: Scan-Speak

Model: 18W/8531G00

Note/SN:

--Mechanical Parameters--

$F_s$  = 27.5 hertz

$Q_{ms}$  = 5.000

$V_{as}$  = 2.154 cu.ft

$C_{ms}$  = 0.334 in/lb

$M_{ms}$  = 0.617 oz

$R_{ms}$  = 1.337 lbs/sec

$X_{max}$  = 0.256 in

$S_d$  = 23.3 sq.in

Dia = 5.4 in

--Electrical Parameters--

$Q_{es}$  = 0.390

$R_e$  = 5.8 ohms

$L_e$  = 0.3 mH

$Z$  = 8.0 ohms

$BL$  = 6.7 N/A

$P_e$  = 70.0 watts

--Combination Parameters--

$Q_{ts}$  = 0.360

$\eta_0$  = 0.219%

Sens = 87.00 dB (2.83 V)

--Multiple Drivers--

Number = 2

Standard

Wiring: parallel

NetZ = 4.0 ohms

NetRe = 2.9 ohms

NetSens = 93.0 dB

## Multiple Driver

### Custom Vented Box

#### Parameters

$V_b$  = 2.119 cu.ft

$F_b$  = 33.5 hertz

$F_3$  = 35.2 hertz

$Q_L$  = 7.0

Fill = normal

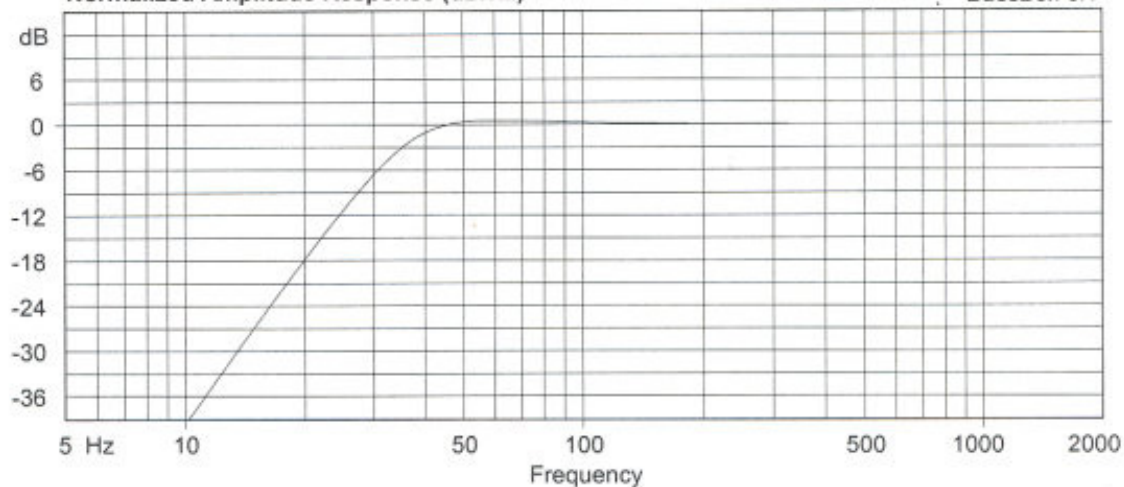
Ports = 1 (round)

$D_v$  = 3.00 in

$L_v$  = 5.00 in

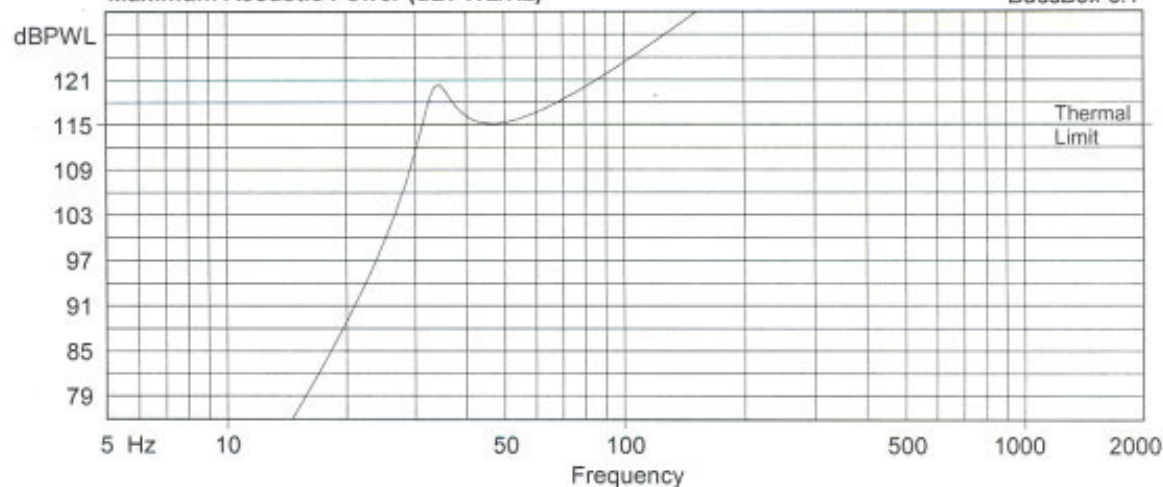
## Normalized Amplitude Response (dB/Hz)

BassBox 5.1



## Maximum Acoustic Power (dB/PWL/Hz)

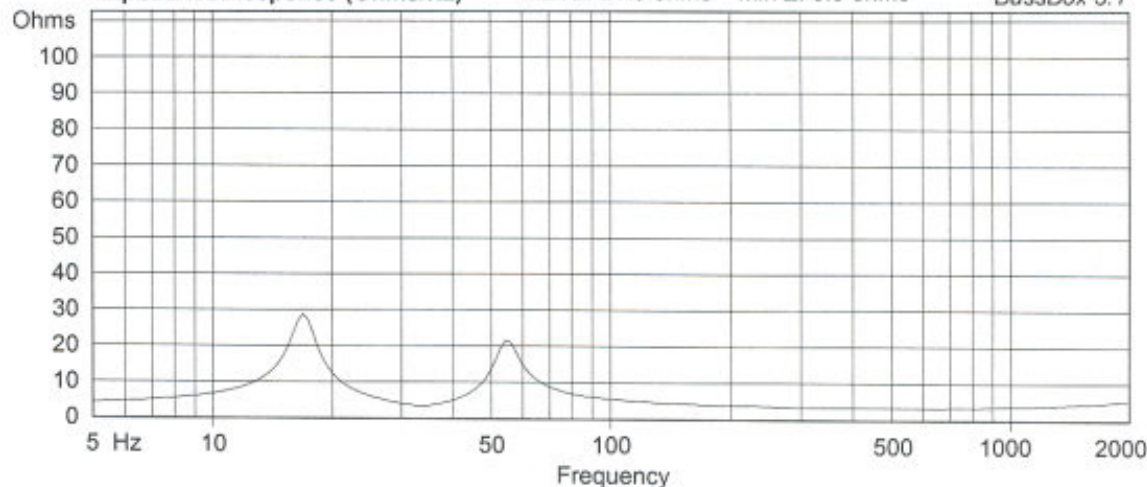
BassBox 5.1



## Impedance Response (Ohms/Hz)

Max Z: 27.9 ohms Min Z: 3.5 ohms

BassBox 5.1



# SCAN-SPEAK EXPRESSION

