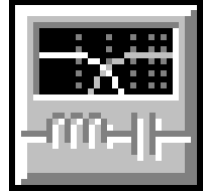


# Custom Two-Way Crossover Network Design

By Eric Chandler, Parts Express



## 2-Way Crossover Network

Low-Pass (LP) Filter: 1 required

Type: 2nd-Order Butterworth

Desired Corner Frequency: 2000 Hz

High-Pass (HP) Filter: 1 required

Type: 2nd-Order Chebychev

Desired Corner Frequency: 3400 Hz

C1 = 9.755  $\mu$ F, Polypropylene, 0.00517 ohms

C2 = 18.97  $\mu$ F, Polypropylene, 0.00375 ohms

L1 = 0.225 mH, Air Core (#16), 0.276 ohms

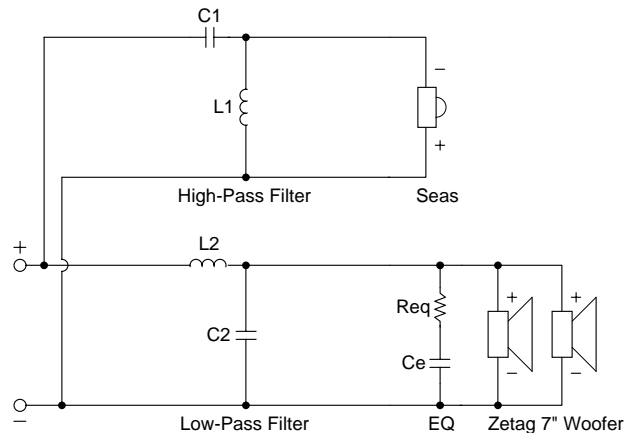
L2 = 0.334 mH, Air Core (#16), 0.288 ohms

## Woofers

### Impedance EQ

Req = 5.93 ohms

Ce = 22.18  $\mu$ F



## Tweeter Properties

--Driver Description--

Name: Seas

Type: Standard one-way driver

--Driver Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 800 Hz  
Vas = 0.000302 cu.ft  
Cms = 0.107 mm/N  
Mms = 0.37 g  
P-Dia = 1.217 in  
Sd = 7.5 sq.cm  
Qes = 0.729  
Re = 4.8 ohms  
Le = 0.05 mH  
Z = 5.76 ohms  
BL = 3.5 N/A  
no = 0.579 %  
1-W SPL = 90 dB  
2.83-V SPL = 92.22 dB

## Woofers Properties

--Driver Description--

Name: Zetag 7" Woofer

Type: Standard one-way driver

--Driver Configuration--

**No. of Drivers = 2**

Mounting = Standard

Wiring = Parallel

--Driver Parameters--

Fs = 38.36 Hz  
Qms = 7.59  
Vas = 0.99 cu.ft [1.98]  
Cms = 1.13 mm/N [0.565]  
Mms = 15.24 g [30.48]  
Rms = 0.484 kg/s [0.968]  
P-Dia = 5.125 in [7.248]  
Sd = 132.2 sq.cm [264.3]  
Qes = 0.39  
Re = 5.93 ohms [2.965]  
Le = 0.78 mH [0.39]  
Z = 7.116 ohms [3.558]  
BL = 7.49 N/A [7.473]  
Qts = 0.37  
no = 0.391 % [0.782]  
1-W SPL = 88 dB [91.01]  
2.83-V SPL = 89.37 dB [95.39]



Graph Key: — LP — HP — Net

