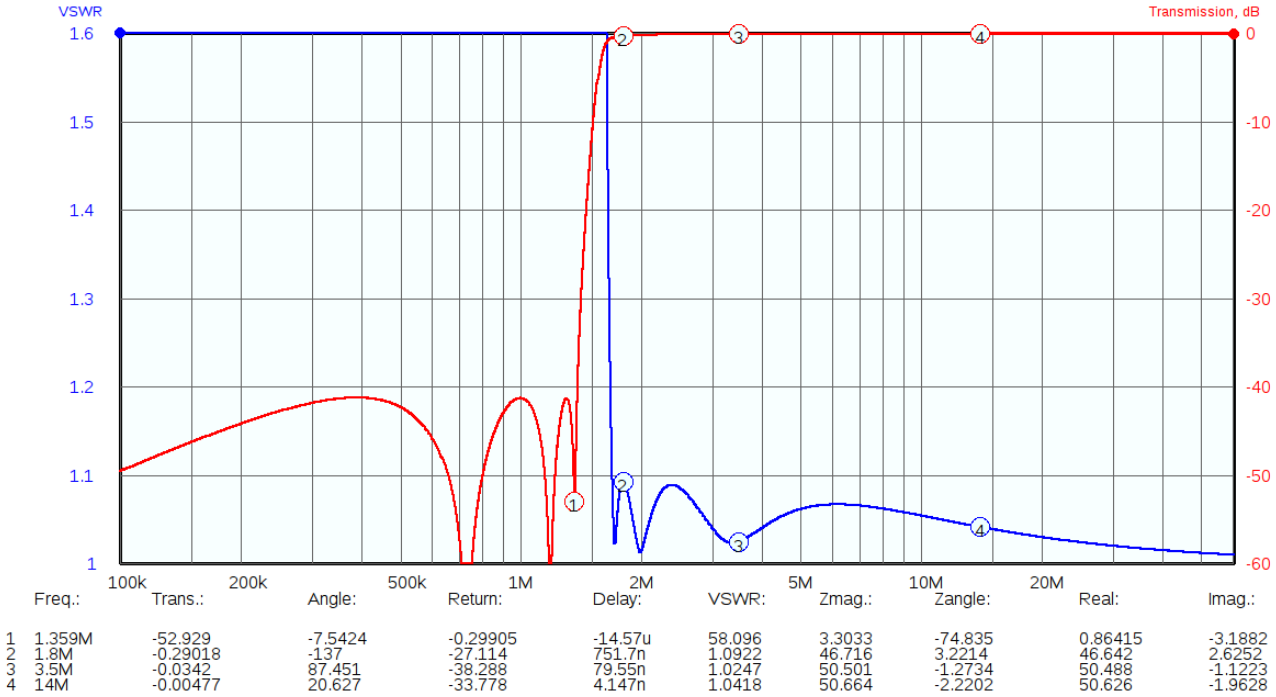
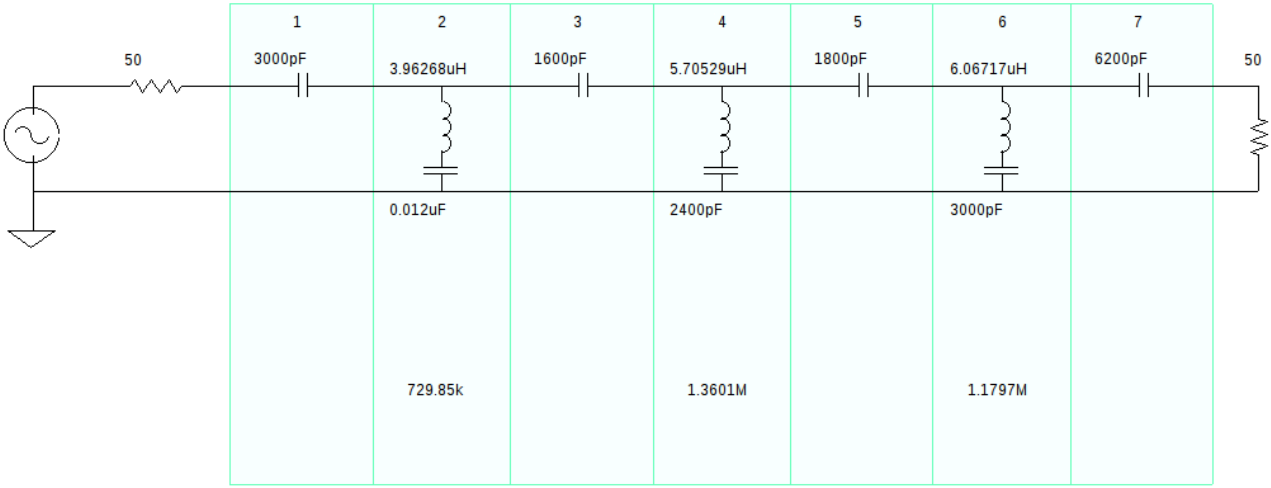
The following are a set of plots for suitable Hi pass filters for Hermes lite. All filters are 5 pole Cauer and designed with a maximum of 2 E12 caps in parallel but in most cases will be a single capacitor.

160 Metre Plot and schematic follow




| | Freq.: | Trans.: | Angle: | Return: | Delay: | VSWR: | Zmag.: | Zangle: | Real: | Imag.: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.359M | -52.929 | -7.5424 | -0.29905 | -14.57u | 58.096 | 3.3033 | -74.835 | 0.86415 | -3.1882 |
| 2 | 1.8M | -0.29018 | -137 | -27.114 | 751.7n | 1.0922 | 46.716 | 3.2214 | 46.642 | 2.6252 |
| 3 | 3.5M | -0.0342 | 87.451 | -38.288 | 79.55n | 1.0247 | 50.501 | -1.2734 | 50.488 | -1.1223 |
| 4 | 14M | -0.00477 | 20.627 | -33.778 | 4.147n | 1.0418 | 50.664 | -2.2202 | 50.626 | -1.9628 |



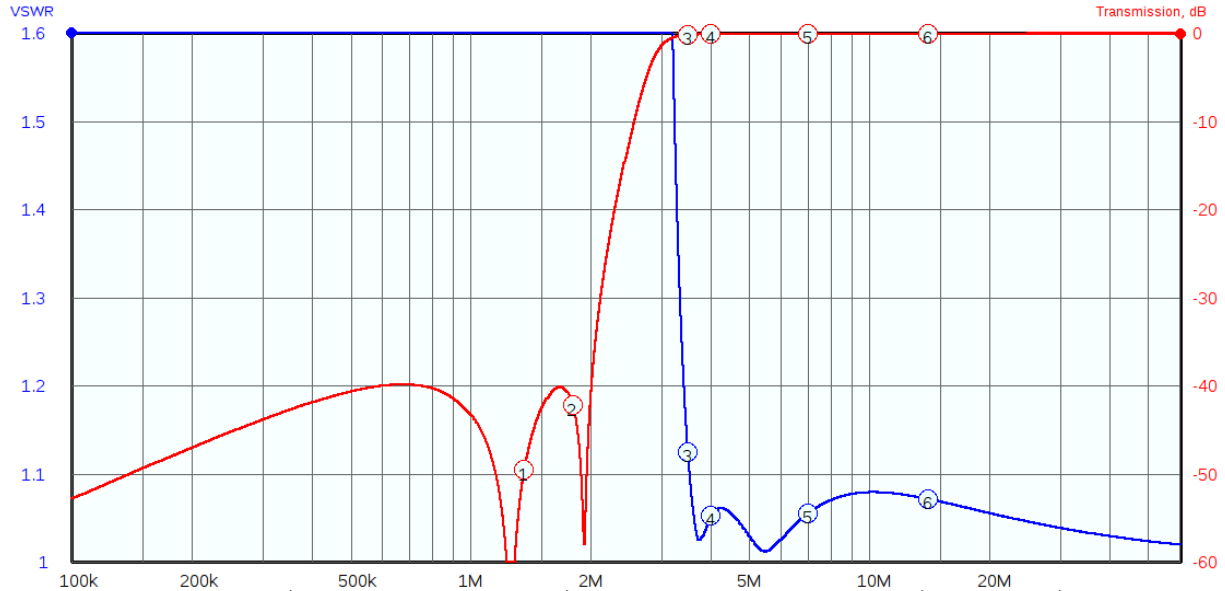

Design data:
Bandwidth: 1.7M
Family: Manual entry

Q values:
Inductors: 140
Capacitors: 1000

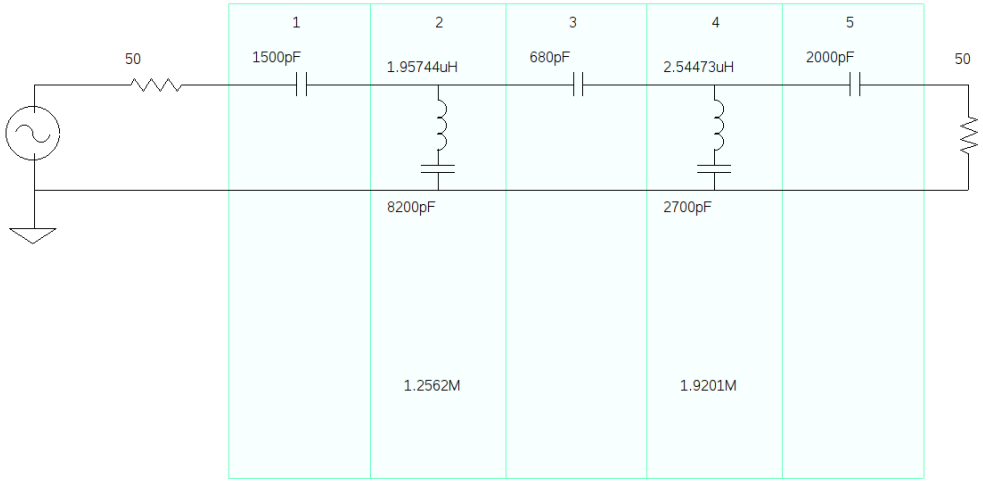
Maximum / minimum ratios:
Capacitors: 7.5
Inductors: 1.5311

Unbalanced preview
Normal - unbalanced
Balanced - A
Balanced - B

80 Metre Plot and schematic follow




| | Freq.: | Trans.: | Angle: | Return: | Delay: | VSWR: | Zmag.: | Zangle: | Real: | Imag.: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.36M | -49.564 | -163.09 | -0.04232 | -53.4n | 410.49 | 75.531 | -89.697 | 0.39977 | -75.53 |
| 2 | 1.8M | -42.236 | -179.6 | -0.08085 | 50.49n | 214.87 | 46.541 | -89.465 | 0.4343 | -46.539 |
| 3 | 3.5M | -0.17138 | 157.04 | -24.609 | 206.9n | 1.125 | 50.819 | 6.6685 | 50.476 | 5.9014 |
| 4 | 4M | -0.09726 | 128.8 | -31.851 | 123.9n | 1.0524 | 47.582 | -0.71474 | 47.578 | -0.59355 |
| 5 | 7M | -0.02752 | 66.312 | -31.382 | 28.8n | 1.0554 | 52.676 | -0.79537 | 52.671 | -0.73122 |
| 6 | 14M | -0.01194 | 32.175 | -29.196 | 6.543n | 1.0719 | 51.991 | -3.2851 | 51.906 | -2.9793 |



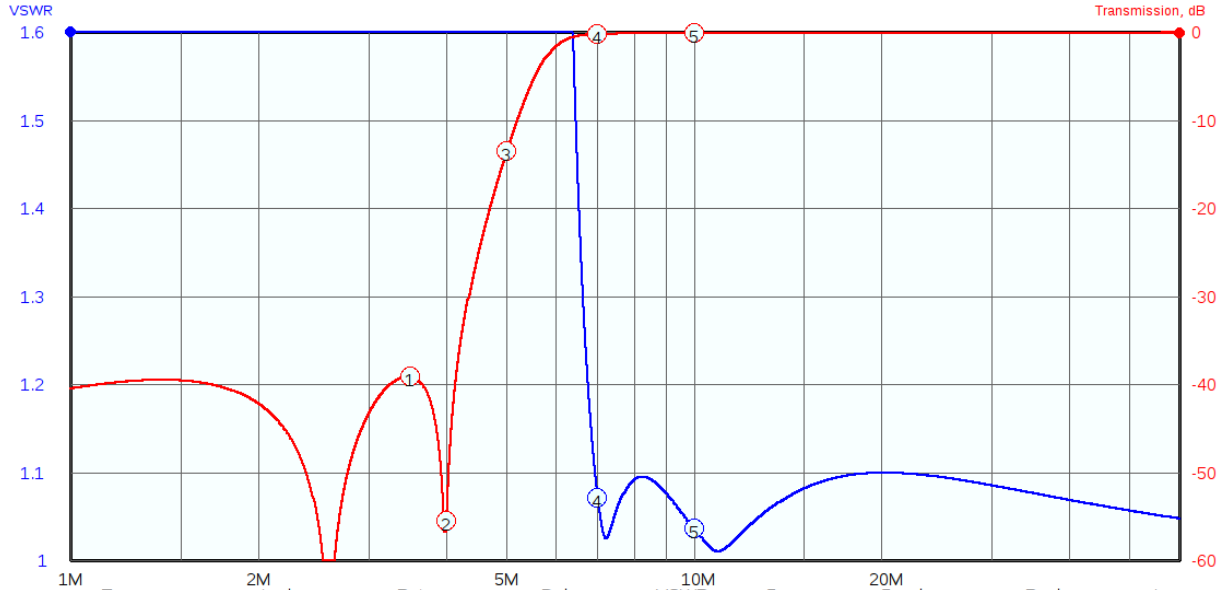

Design data:
Bandwidth: 3.4M
Family: Manual entry

Q values:
Inductors: 140
Capacitors: 1000

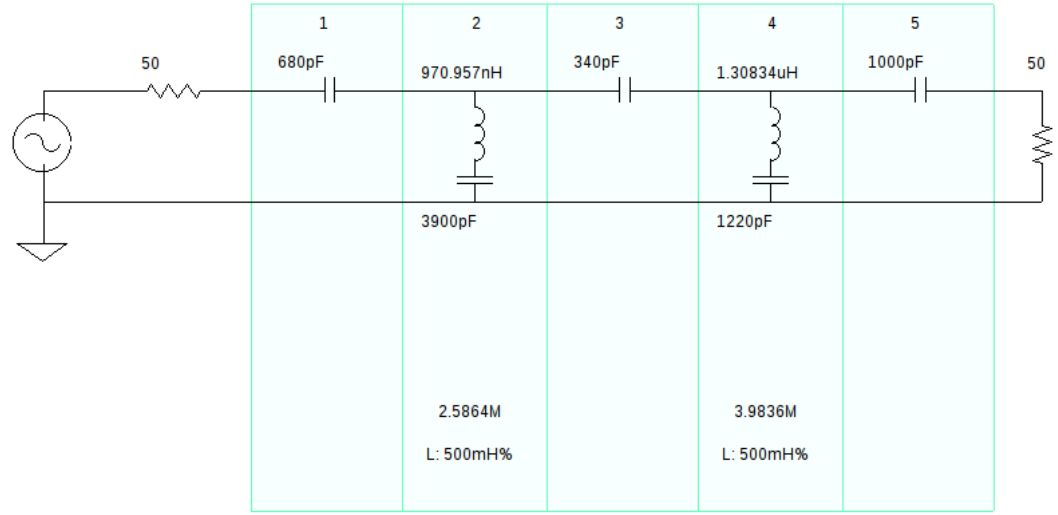
Maximum / minimum ratios:
Capacitors: 12.059
Inductors: 1.3

Unbalanced preview
Normal - unbalanced
Balanced - A
Balanced - B

40 Metre Plot and schematic follow




| | Freq.: | Trans.: | Angle: | Return: | Delay: | VSWR: | Zmag.: | Zangle: | Real: | Imag.: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.5M | -39.019 | -174.37 | -0.06614 | 64.32n | 262.66 | 56.469 | -89.561 | 0.43315 | -56.467 |
| 2 | 4M | -55.473 | -72.154 | -0.09551 | -4.947u | 181.9 | 42.35 | -89.361 | 0.47208 | -42.348 |
| 3 | 5M | -13.467 | -62.314 | -0.44552 | 170.2n | 39.001 | 15.578 | -84.823 | 1.4056 | -15.515 |
| 4 | 7M | -0.16915 | 160.03 | -29.242 | 107.3n | 1.0715 | 49.336 | 3.8776 | 49.223 | 3.3363 |
| 5 | 10M | -0.05445 | 98.358 | -34.914 | 33.05n | 1.0366 | 48.401 | -0.87527 | 48.395 | -0.73935 |



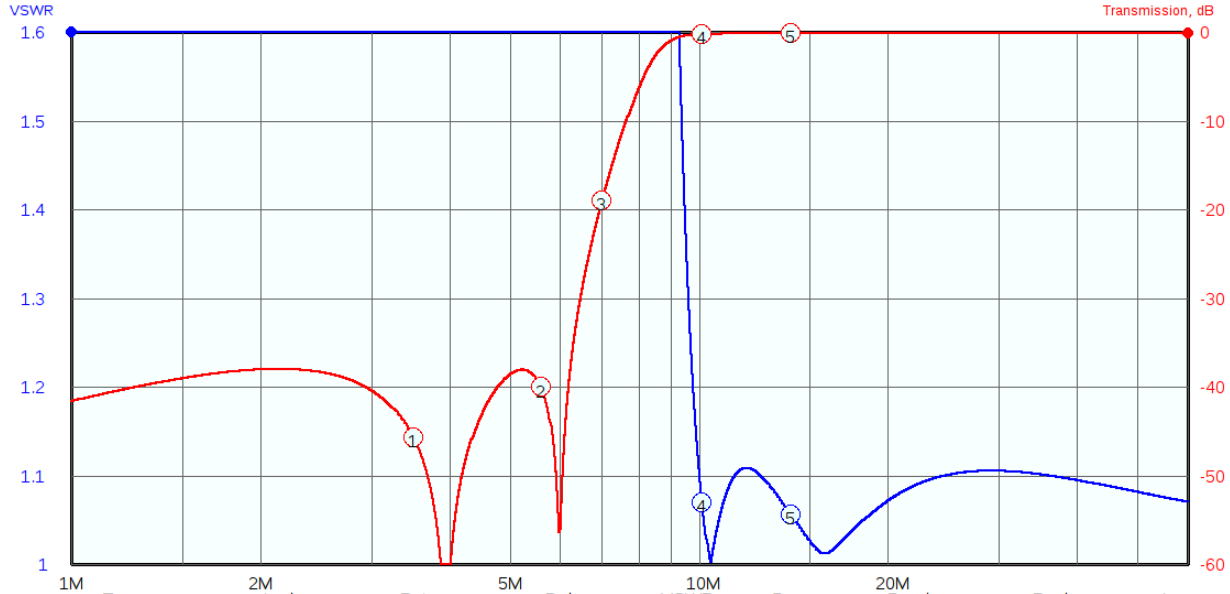

Design data:
Bandwidth: 6.9M
Family: Manual entry

Q values:
Inductors: 140
Capacitors: 1000

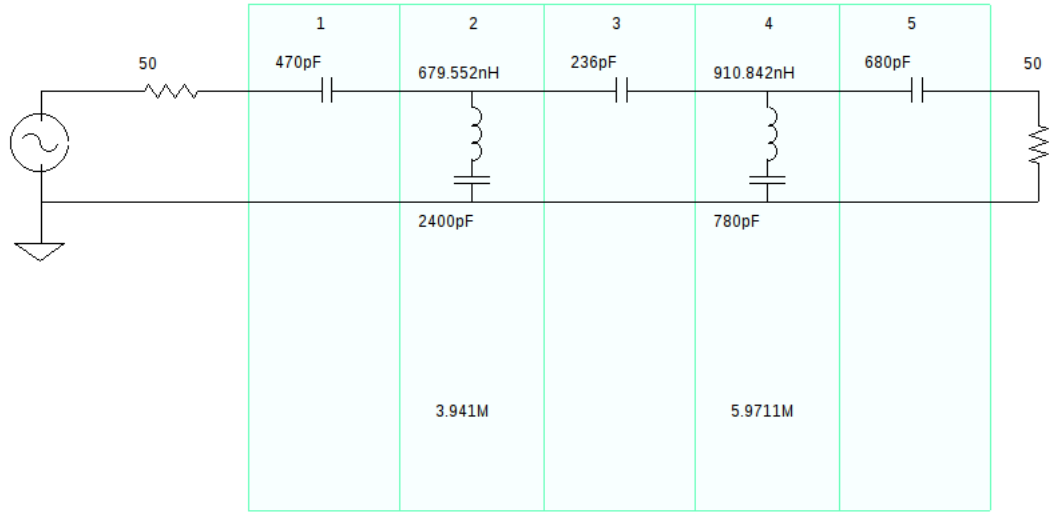
Maximum / minimum ratios:
Capacitors: 11.471
Inductors: 1.3475

Unbalanced preview
Normal - unbalanced
Balanced - A
Balanced - B

30-20 Metre Plot and schematic follow




| | Freq.: | Trans.: | Angle: | Return: | Delay: | VSWR: | Zmag.: | Zangle: | Real: | Imag.: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.5M | -45.627 | 41.183 | -0.0269 | 18.36n | 645.68 | 100.68 | -89.777 | 0.39144 | -100.68 |
| 2 | 5.6M | -39.985 | 179.04 | -0.07953 | 23.34n | 218.43 | 47.109 | -89.474 | 0.43211 | -47.107 |
| 3 | 7M | -18.887 | -48.509 | -0.23868 | 96.55n | 72.786 | 21.515 | -87.832 | 0.81398 | -21.5 |
| 4 | 10.1M | -0.16921 | 162.32 | -29.418 | 78.58n | 1.07 | 50.834 | 3.7558 | 50.724 | 3.3298 |
| 5 | 14M | -0.05834 | 102.44 | -31.197 | 25.23n | 1.0567 | 47.619 | -1.4682 | 47.603 | -1.2201 |



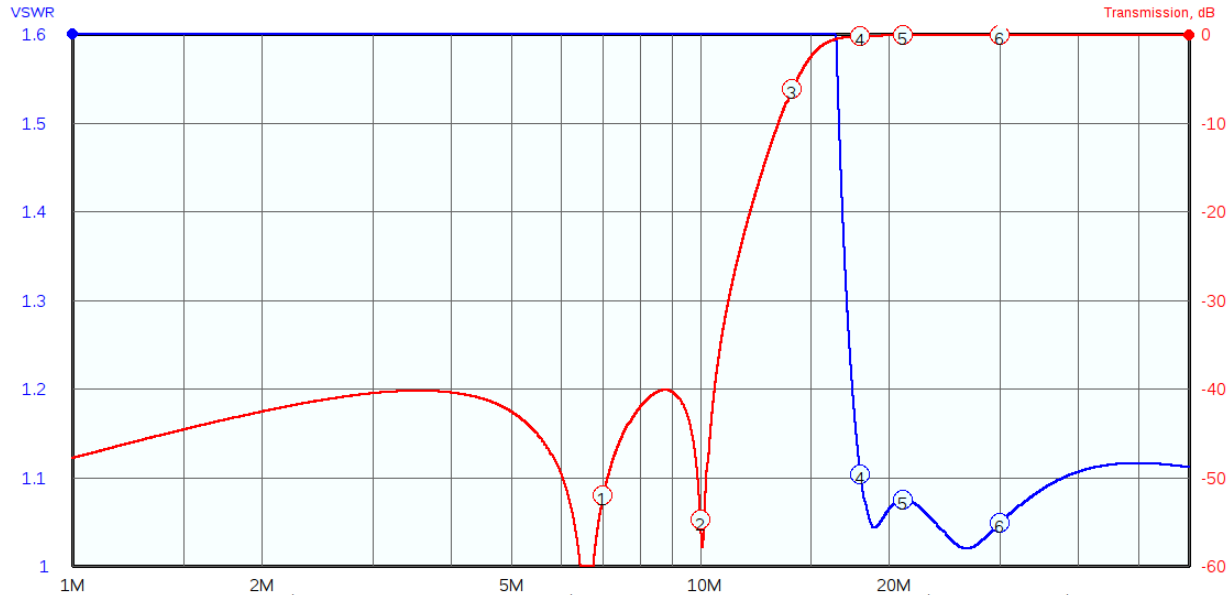

Design data:
Bandwidth: 10M
Family: Manual entry

Q values:
Inductors: 150
Capacitors: 1000

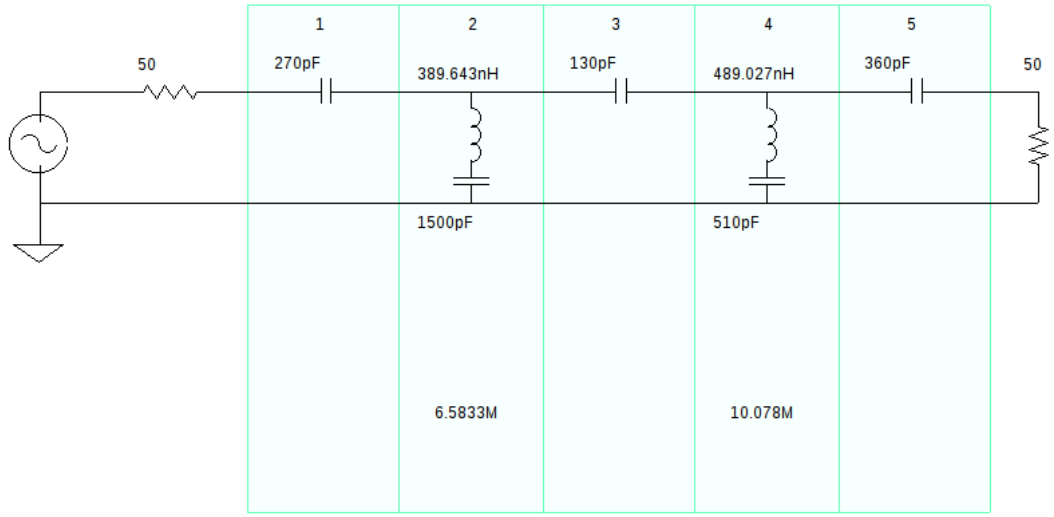
Maximum / minimum ratios:
Capacitors: 10.169
Inductors: 1.3404

Unbalanced preview
Normal - unbalanced
Balanced - A
Balanced - B

17-15 Metre Plot and schematic follow




| | Freq.: | Trans.: | Angle: | Return: | Delay: | VSWR: | Zmag.: | Zangle: | Real: | Imag.: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7M | -51.999 | -161.31 | -0.03963 | -37.47n | 438.38 | 82.21 | -89.706 | 0.4224 | -82.209 |
| 2 | 10M | -54.774 | -147.98 | -0.09578 | -776.6n | 181.37 | 43.314 | -89.362 | 0.48255 | -43.311 |
| 3 | 14M | -6.151 | -94.964 | -1.7001 | 89.26n | 10.251 | 5.2759 | 22.183 | 4.8854 | 1.992 |
| 4 | 18M | -0.17882 | 161.04 | -26.1 | 41.67n | 1.1043 | 53.738 | 3.8954 | 53.614 | 3.6506 |
| 5 | 21M | -0.09915 | 128.14 | -28.816 | 23.12n | 1.0752 | 48.59 | -3.8145 | 48.482 | -3.2325 |
| 6 | 30M | -0.04014 | 82.813 | -32.478 | 8.764n | 1.0487 | 52.201 | -1.1537 | 52.19 | -1.051 |



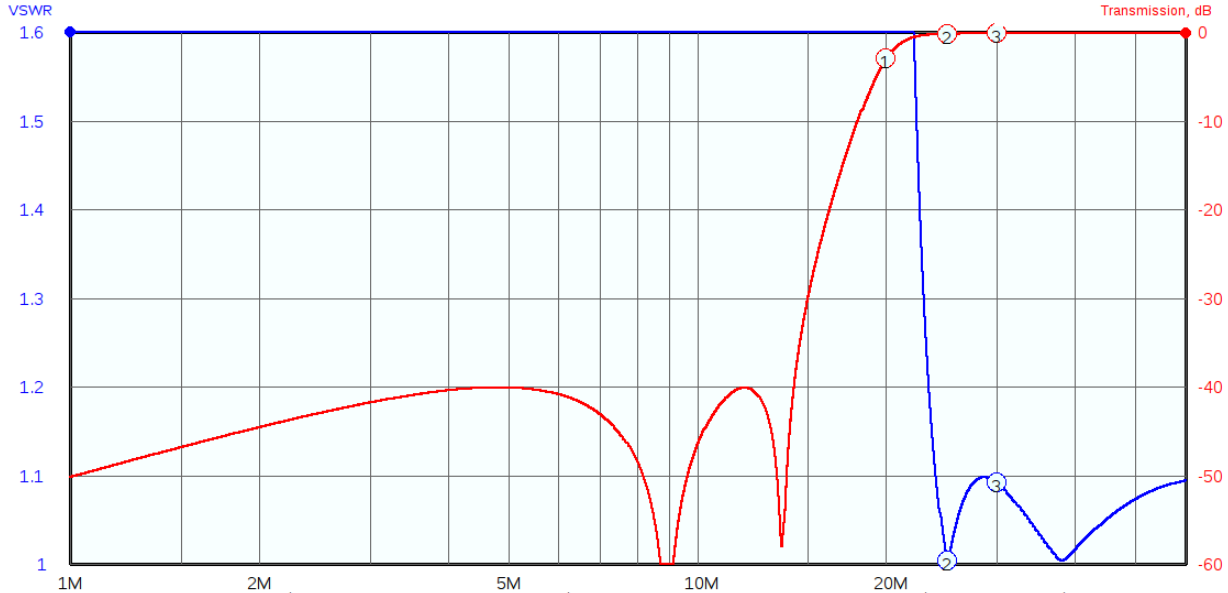

Design data:
Bandwidth: 18.06M
Family: Manual entry

Q values:
Inductors: 140
Capacitors: 1000

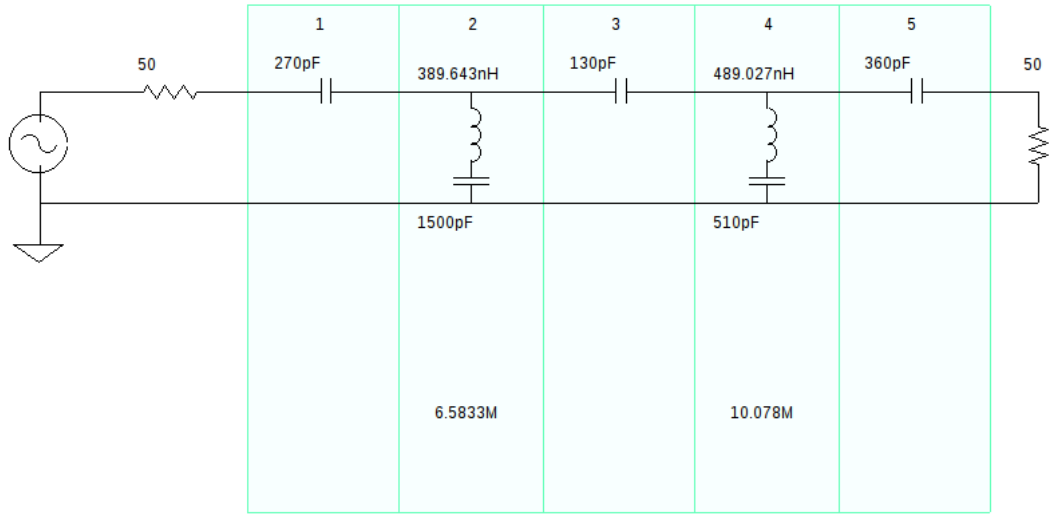
Maximum / minimum ratios:
Capacitors: 11.538
Inductors: 1.2551

Unbalanced preview
Normal - unbalanced
Balanced - A
Balanced - B

12-10 Metre Plot and schematic follow




| | Freq.: | Trans.: | Angle: | Return: | Delay: | VSWR: | Zmag.: | Zangle: | Real: | Imag.: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20M | -2.9146 | -121.93 | -3.9346 | 70.44n | 4.4903 | 16.855 | 45.498 | 11.814 | 12.022 |
| 2 | 25M | -0.14465 | 153.69 | -53.226 | 27.21n | 1.0044 | 49.794 | 0.08085 | 49.794 | 0.07026 |
| 3 | 30M | -0.08663 | 118.82 | -27.049 | 14.35n | 1.093 | 46.369 | -2.6949 | 46.318 | -2.1802 |




Design data:
Bandwidth: 18.06M
Family: Manual entry

Q values:
Inductors: 140
Capacitors: 1000

Maximum / minimum ratios:
Capacitors: 11.538
Inductors: 1.2551

Unbalanced preview
Normal - unbalanced
Balanced - A
Balanced - B