

Butterworth Pole Locations

Order	Real -a	Imaginary +/-jb
2	0.7071	0.7071
3	0.5000 1.0000	0.8660
4	0.9239 0.3827	0.3827 0.9239
5	0.8090 0.3090 1.0000	0.5878 0.9511
6	0.9659 0.7071 0.2588	0.2588 0.7071 0.9659
7	0.9010 0.6235 0.2225 1.0000	0.4339 0.7818 0.9749
8	0.9808 0.8315 0.5556 0.1951	0.1951 0.5556 0.8315 0.9808
9	0.9397 0.7660 0.5000 0.1737 1.0000	0.3420 0.6428 0.8660 0.9848
10	0.9877 0.8910 0.7071 0.4540 0.1564	0.1564 0.4540 0.7071 0.8910 0.9877

Bessel Pole Locations

Order	Real -a	Imaginary +/-jb
2	1.1030	0.6368
3	1.0509 1.3270	1.0025
4	1.3596 0.9877	0.4071 1.2476
5	1.3851 0.9606 1.5069	0.7201 1.4756
6	1.5735 1.3836 0.9318	0.3213 0.9727 1.6640
7	1.6130 1.3797 0.9104 1.6853	0.5896 1.1923 1.8375
8	1.7627 0.8955 1.3780 1.6419	0.2737 2.0044 1.3926 0.8253
9	1.8081 1.6532 1.3683 0.8788 1.8575	0.5126 1.0319 1.5685 2.1509

0.01dB Chebyshev Pole Locations

Order	Real -a	Imaginary +/-jb
2	0.6743	0.7075
3	0.4233 0.8467	0.8663
4	0.6762 0.2801	0.3828 0.9241
5	0.5120 0.1956 0.6328	0.5879 0.9512
6	0.5335 0.3906 0.1430	0.2588 0.7072 0.9660
7	0.4393 0.3040 0.1085 0.4876	0.4339 0.7819 0.9750
8	0.4268 0.3618 0.2418 0.0849	0.1951 0.5556 0.8315 0.9808
9	0.3686 0.3005 0.1961 0.0681 0.3923	0.3420 0.6428 0.8661 0.9848

0.1dB Chebyshev Pole Locations

Order	Real -a	Imaginary +/-jb
2	0.6104	0.7106
3	0.3490 0.6979	0.8684
4	0.2177 0.5257	0.9254 0.3833
5	0.3842 0.1468 0.4749	0.5884 0.9521
6	0.3916 0.2867 0.1049	0.2590 0.7077 0.9667
7	0.3178 0.2200 0.0785 0.3528	0.4341 0.7823 0.9755
8	0.3058 0.2592 0.1732 0.0608	0.1952 0.5558 0.8319 0.9812
9	0.2622 0.2137 0.1395 0.0485 0.2790	0.3421 0.6430 0.8663 0.9852

0.25dB Chebyshev Pole Locations

Order	Real -a	Imaginary +/-jb
2	0.5621	0.7154
3	0.3062 0.6124	0.8712
4	0.4501 0.1865	0.3840 0.9272
5	0.3247 0.1240 0.4013	0.5892 0.9533
6	0.3284 0.2404 0.0880	0.2593 0.7083 0.9675
7	0.2652 0.1835 0.0655 0.2944	0.4344 0.7828 0.9761
8	0.2543 0.2156 0.1441 0.0506	0.1953 0.5561 0.8323 0.9817
9	0.2176 0.1774 0.1158 0.0402 0.2315	0.3423 0.6433 0.8667 0.9856

0.5dB Chebyshev Pole Locations

Order	Real -a	Imaginary +/-jb
2	0.5129	0.7225
3	0.2683 0.5366	0.8753
4	0.3872 0.1605	0.3850 0.9297
5	0.2767 0.1057 0.3420	0.5902 0.9550
6	0.2784 0.2037 0.0746	0.2596 0.7091 0.9687
7	0.2241 0.1550 0.0553 0.2487	0.4349 0.7836 0.9771
8	0.2144 0.1817 0.1214 0.0426	0.1955 0.5565 0.8328 0.9824
9	0.1831 0.1493 0.0974 0.0338 0.1949	0.3425 0.6436 0.8671 0.9861

1dB Chebyshev Pole Locations

Order	Real -a	Imaginary +/-jb
2	0.4508	0.7351
3	0.2257 0.4513	0.8822
4	0.3199 0.1325	0.3868 0.9339
5	0.2265 0.0865 0.2800	0.5918 0.9575
6	0.2268 0.1660 0.0608	0.2601 0.7106 0.9707
7	0.1819 0.1259 0.0449 0.2019	0.4354 0.7846 0.9785
8	0.1737 0.1473 0.0984 0.0346	0.1956 0.5571 0.8337 0.9836
9	0.1482 0.1208 0.0788 0.0274 0.1577	0.3427 0.6442 0.8679 0.9869