

180 kHz through 3000 kHz LF BPF set

T1 3T #30 AWG bifilar on BN-43-2402 core
T2 7T #30 AWG bifilar on BN-43-2402 core
T3 Primary 7T #30 AWG on BN-43-2402 core
T3 Secondary 3T bifilar, #30 AWG over Primary

180 kHz to 480 kHz BPF [L1/L3 55uH, 117T, 61 inches, on T37-2 core
L2 26uH, 80T, 43 inches, on T37-2 core
C7=C9=6800pF, C8=0.015uF

400 kHz to 800 kHz BPF [L4/L6 20uH, 68T, 36 inches, on T30-2 core
L5 4.6uH, 32T, 18 inches, on T30-2 core
C11=C13=3300pF, C12=0.015uF

800 kHz to 1600 kHz BPF [L7/L9 10 uH, 48T, 26 inches, on T30-2 core
L8 2.7uH, 25T, 15 inches, on T30-2 core
C14=C16=1800pF, C15=6800pF

1600 kHz to 3000 kHz BPF [L10/L12 4.6 uH, 32T, 18 inches, on T30-2 core
L11 1.3uH, 17T, 11 inches, on T30-2 core
C17=C19=1000pF, C18=3300pF

R17, R19, R20, and R22 omitted
C6, C10, R18 and R21 replace with jumpers
R30 and R31 are 49.9 ohm resistors

1.8 MHz through 30 MHz HF BPF set

T1 2T #30 AWG bifilar on BN-43-2402 core
T2 4T #30 AWG bifilar on BN-43-2402 core
T3 Primary 4T #30 AWG on BN-43-2402 core
T3 Secondary 2T bifilar, #30 AWG over Primary

1.8 MHz to 4 MHz BPF [L1/L3 5.5uH, 35T, 20 inches, on T30-2 core
L2 2.6uH, 24T, 15 inches, on T30-2 core
C7=C9=680pF, C8=1500pF

4 MHz to 8 MHz BPF [L4/L6 2.0uH, 21T, 13 inches, on T30-2 core
L5 0.46uH, 10T, 8 inches, on T30-2 core
C11=C13=390pF, C12=1500pF

8 MHz to 16 MHz BPF [L7/L9 1.0uH, 19T, 9 inches, on T25-6 core
L8 0.27uH, 10T, 6 inches, on T25-6 core
C14=C16=180pF, C15=680pF

16 MHz to 30 MHz BPF [L10/L12 0.46uH, 13T, 7 inches, on T25-6 core
L11 0.13uH, 7T, 5 inches, on T25-6 core
C17=C19=100pF, C18=390pF

R17, R19, R20, and R22 are 75 ohm 1/6 W resistors
R18 and R21 are 120 ohm 1/6 W resistors
C6 and C10 are 0.047uF
R30 and R31 are 10.0 ohm resistors

Notes:

For 6/15/10 circuit board:

Primary or secondary leads of T1 should be crossed
Primary or secondary leads of T2 should be crossed
#30 AWG wire used to wind L1 through L12 and T1 through T3

For 6/20/13 circuit board:

No T1 or T2 lead crossing needed
#27 AWG wire used to wind L1 through L12 for HF build of kit
#30 AWG wire used to wind L1, L2, L3, L4, and L6, for LF build of kit
#27 AWG wire used to wind L5, and L7 through L12 for LF build of kit
#30 AWG wire used to wind T1 through T3

SoftRock Projects

RX Ensemble II

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