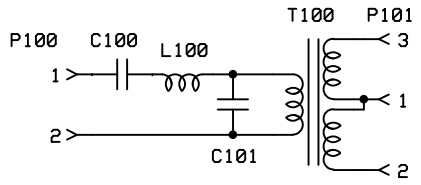

RX BPF module

Band specific values for RX BPF module

Bands	C100	C101	L100	T100
160m	390pF	5600pF	18.7uH, T30-2(red) core 66T #30 AWG	1.4uH(primary), T30-2(red) core 18T #30 AWG on primary 9T #30 AWG on each bifilar secondary
80m/40m	560pF	680pF	1.6uH, T25-2(red) core 22T #30 AWG	1.2uH(primary), T25-2(red) core 18T #30 AWG on primary 9T #30 AWG on each bifilar secondary
30m/20m/17m	180pF	220pF	0.78uH, T25-6(yellow) core 17T #30 AWG	0.6uH(primary), T25-6(yellow) core 14T #30 AWG on primary 7T #30 AWG on each bifilar secondary
15m/12m/10m	82pF	330pF	0.53uH, T25-6(yellow) core 14T #30 AWG	0.13uH(primary), T25-6(yellow) core 7T #30 AWG on primary 4T #30 AWG on each bifilar secondary

Bill of Materials for RX BPF module

Band specific components	Quantity
C100, C101, L100, T100	1 each (see band specific values)

Connectors	Used where	Quantity
2-pin header	P100	1
3-pin header	P101	1

Circuit board	Quantity
Lite+Xtall BPF board	1

Bill of Materials for RXTX+Xtall v6.3

Resistors	Used where	Quantity
10.0k 1%	R1, R2, R4, R5, R7, R8, R10, R11, R19, R20, R25, R37, R38, R39, R40, R44, R45, R48	18
49.9 1%	R3, R6, R9, R12, R17, R18	6
2.21k 1%	R13, R14, R16, R22, R31, R32	6
3.32k 1%	R15	1
4.99k 1%	R21, R26, R29, R30, R53, R54	6
22.1 1%	R23	1
22.1k 1%	R24, R27	2
221 1%	R28	1
100 1/6W	R33, R34, R35, R36, R43, R55, R56	7
1.00k 1%	R41, R42, R51, R52	4
10.0 1%	R46, R47, R49, R50	4

Capacitors	Used where	Quantity
1000pF ceramic	C1, C8	2
10uF, 16v	C2, C4, C6, C9, C11, C13, C15, C16, C17, C18, C19, C20, C21 C22, C23, C24, C25, C26, C31	19
100pF ceramic	C3, C10	2
0.022uF ceramic	C5, C7, C12, C14	4
0.033uF ceramic	C27	1
0.047uF ceramic	C28, C29, C36, C37	4
4.7uF ceramic	C32, C33, C35	3
0.01uF ceramic	C30, C34	2
220pF ceramic	C38, C39	2
0.1uF,SMT1206	C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C55, C60, C62, C63, C64, C65	18 (black marked strip)
0.01uF,SMT1206	C52, C53, C54, C56, C57, C58, C59, C61	8

Inductors	Used where	Quantity
4T, #26 on BN-43-2402	RFC1	1

Diodes	Used where	Quantity
1N4003	D1, D2	2

Transistors	Used where	Quantity
2N3904	Q1, Q3, Q4	3
2N3906	Q2	1
BS170	Q7, Q8	2

Bill of Materials for RXTX+Xtall v6.3

ICs	Used where	Quantity
TLV2462, SOIC8	U1, U2 on bottom of board	2
FST3253, SOIC16	U3, U10 on bottom of board	2
LM7805	U4 on top of board	1
LP2992AIM5-3.3v, SOT23-5	U5 on bottom of board	1
12F683 and socket	U6 on top of board	1 each
Si570, (LVDS or CMOS)	U7 on bottom of board	1
FIN1002, SOT23-5	U8 on bottom of board	1
(only used if LVDS Si570 used)		
74AC74, SOIC14	U9 on bottom of board	1
LT6231, SOIC8	U11 on bottom of board	1

Connectors	Used where	Quantity
4-pin sockets	J1	1
5-pin sockets	J2	1
2-pin sockets	J3	1
3-pin sockets	J4	1
DB-9 female	external wiring	1

Switch	Used where	Quantity
4-position DIP switch	SW1	1

Circuit board	Quantity
RXTX+Xtall v6.3	1

Hardware	Quantity
4-40 3/8 inch machine screw	5
4-40 hex nut	5
#4 lock wahser	1
#4 1/8 inch nylon spacer	4
#4 nylon washer	4

SoftRock Projects		
RXTX+Xtall v6.3		
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