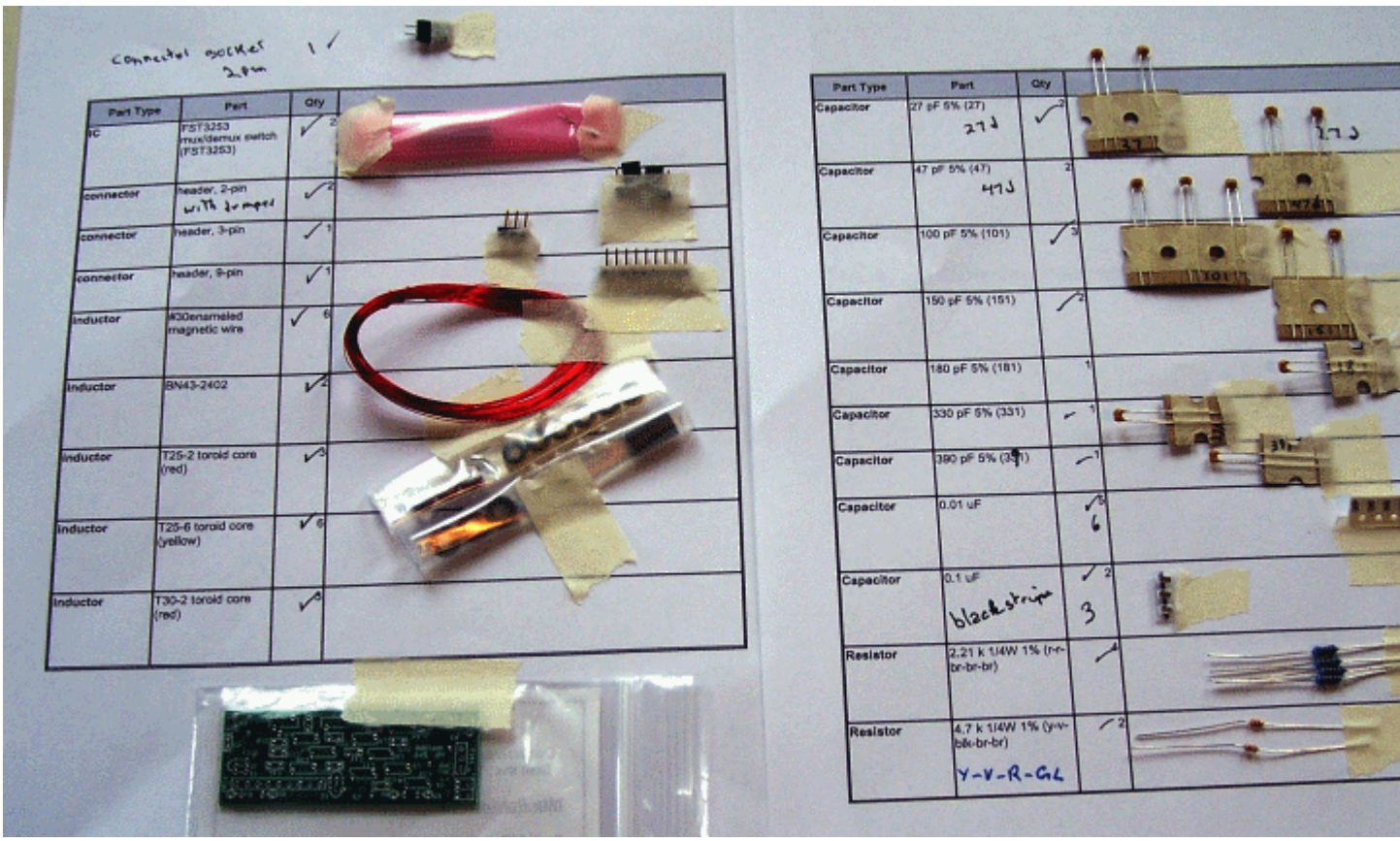
HF BPF 00_Bill of Materials

Bill of Materials Introduction

General

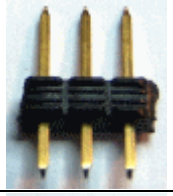
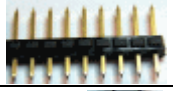
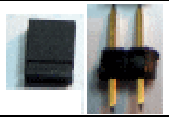
Inventory your kit before doing anything else. You may want to print out and use the inventory sheet provided in this web site to aid you in identifying and arranging the various components.

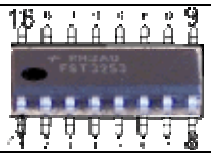


Bill of Materials

Component Inventory Summary

Component	Value	Markings	Quantity

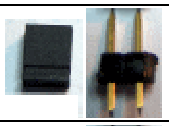
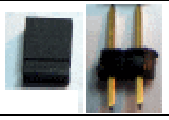
Capacitor-Ceramic	5.6 pF 5%	5.6	2
Capacitor-Ceramic	27 pF 5%	27J	2
Capacitor-Ceramic	39pF 5%	39J	1
Capacitor-Ceramic	47 pF 5%	47J	2
Capacitor-Ceramic	100 pF 5%	101	3
Capacitor-Ceramic	120 pF 5%	121	2
Capacitor-Ceramic	150 pF 5%	151	2
Capacitor-Ceramic	180 pF 5%	181	1
Capacitor-Ceramic	270 pF 5%	271	1
Capacitor-Ceramic	330 pF 5%	331	1
Capacitor-Ceramic	390 pF 5%	391	1
Capacitor-SMT 1206	0.01 uF		5
Capacitor-SMT 1206	0.1 uF	black stripe 	2
Capacitor-unused	not used		1
connector-header	header, 3-pin		1
connector-header	header, 9-pin		1
connector-jumper	header, 2-pin w/jumper		2
connector-socket	header,female, 2 pin		1
IC-SOIC-16	FST3253 mux/demux switch	FST3253	2

			
inductor-binocular core	BN43-2402		2
inductor-coil	0.53 uH 14T #30 on T25-6 (10")	yellow	1
inductor-coil	1.1 uH 20T #30 on T25-6 (11")	yellow	1
inductor-coil	1.64 uH 23T #30 on T25-6 (15")	yellow	2
inductor-coil	2 uH 27T #30 on T25-6 (16")	yellow	2
inductor-coil	2.1 uH 24T #30 0n T25-2 (14")	red	1
inductor-coil	3.5 uH 32T #30 on T25-2 (15")	red	1
inductor-coil	4 uH 38T #30 on T25-6 (18")	yellow	2
inductor-coil	8 uH 49T #30 on T25-2 (22")	red	4
inductor-coil	10.7 uH 50T #30 on T30-2 (28")	red	1
inductor-coil	23 uH 71T #30 on T30-2 (39")	red	2
inductor-misc	#30enameled magnetic wire		6
inductor-toroid	T25-2 toroid core	red 	3
inductor-toroid	T25-6 toroid core	yellow 	6
inductor-toroid	T30-2 toroid core	red 	3
inductor-transformer	4T #30 trifilar BN43-2402 (7")		1

inductor-transformer	8T/2T bifilar BN43-2402 (10")		1
Resistor-1/4W	2.21 k 1/4W 1%	r-r-br-br-br 	4
Resistor-1/4W	4.7 k 1/4 W 5%	y-v-r-gl 	2

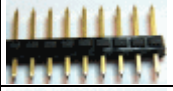
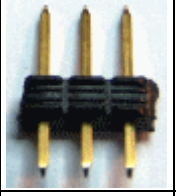
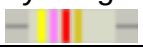
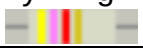
Detailed Bill of Materials

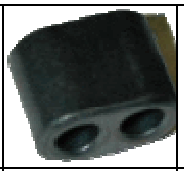
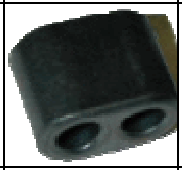
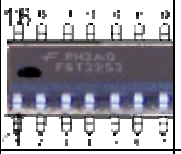
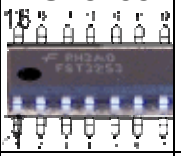
Check	Designation	Component	Marking	Category	Orientation	Notes	Circuit
❑	C01	0.1 uF	black stripe 	SMT 1206			Busses and Rails
❑	C02	0.01 uF		SMT 1206			Busses and Rails
❑	C03	0.01 uF		SMT 1206			Busses and Rails
❑	C04	0.01 uF		SMT 1206			Busses and Rails
❑	C05	0.1 uF	black stripe 	SMT 1206			Busses and Rails
❑	C06	0.01 uF		SMT 1206			Busses and Rails
❑	C07	5.6 pF 5%	5.6	Ceramic			Band1a 6m
❑	C07	150 pF 5%	151	Ceramic			Band 1: 1.8-4 MHz
❑	C08	330 pF 5%	331	Ceramic			Band 1: 1.8-4 MHz
❑	C08	39pF 5%	39J	Ceramic			Band1a 6m
❑	C09	150 pF 5%	151	Ceramic			Band 1: 1.8-4 MHz
❑	C09	5.6 pF 5%	5.6	Ceramic			Band1a 6m
❑	C10	120 pF 5%	121	Ceramic			Band2a 3.5-8 MHz
❑	C10	100 pF 5%	101	Ceramic			Band 2: 4-8 MHz
❑	C11	390 pF 5%	391	Ceramic			Band 2: 4-8 MHz
❑	C11	270 pF 5%	271	Ceramic			Band2a 3.5-8 MHz

❑	C12	120 pF 5%	121	Ceramic			Band2a 3.5-8 MHz
❑	C12	100 pF 5%	101	Ceramic			Band 2: 4-8 MHz
❑	C13	47 pF 5%	47J	Ceramic			Band 3: 8-16 MHz
❑	C14	180 pF 5%	181	Ceramic			Band 3: 8-16 MHz
❑	C15	47 pF 5%	47J	Ceramic			Band 3: 8-16 MHz
❑	C16	27 pF 5%	27J	Ceramic			Band 4: 16-30 MHz
❑	C17	100 pF 5%	101	Ceramic			Band 4: 16-30 MHz
❑	C18	27 pF 5%	27J	Ceramic			Band 4: 16-30 MHz
❑	C19	0.01 uF		SMT 1206			Busses and Rails
❑	JP1	header, 2-pin w/jumper		jumper			Busses and Rails
❑	JP2	header, 2-pin w/jumper		jumper			Busses and Rails
❑	L04	8 uH 49T #30 on T25-2 (22")	red	coil			Band2a 3.5-8 MHz
❑	L05	3.5 uH 32T #30 on T25-2 (15")	red	coil			Band2a 3.5-8 MHz
❑	L06	8 uH 49T #30 on T25-2 (22")	red	coil			Band2a 3.5-8 MHz
❑	L1	23 uH 71T #30 on T30-2 (39")	red	coil			Band 1: 1.8-4 MHz
❑	L1	1.64 uH 23T #30 on T25-6 (15")	yellow	coil			Band1a 6m
❑	L10	2 uH 27T #30 on T25-6 (16")	yellow	coil			Band 4: 16-30 MHz
❑	L10-core	T25-6 toroid core	yellow	toroid			Band 4: 16-30 MHz

							
❑	L11	0.53 uH 14T #30 on T25-6 (10")	yellow	coil			Band 4: 16-30 MHz
❑	L11-core	T25-6 toroid core	yellow 	toroid			Band 4: 16-30 MHz
❑	L12	2 uH 27T #30 on T25-6 (16")	yellow	coil			Band 4: 16-30 MHz
❑	L12-core	T25-6 toroid core	yellow 	toroid			Band 4: 16-30 MHz
❑	L1-core	T30-2 toroid core	red 	toroid			Band 1: 1.8-4 MHz
❑	L2	10.7 uH 50T #30 on T30-2 (28")	red	coil			Band 1: 1.8-4 MHz
❑	L2	not used		unused			Band1a 6m
❑	L2-core	T30-2 toroid core	red 	toroid			Band 1: 1.8-4 MHz
❑	L3	23 uH 71T #30 on T30-2 (39")	red	coil			Band 1: 1.8-4 MHz
❑	L3	1.64 uH 23T #30 on T25-6 (15")	yellow	coil			Band1a 6m
❑	L3-core	T30-2 toroid core	red 	toroid			Band 1: 1.8-4 MHz

❑	L4	8 uH 49T #30 on T25-2 (22")	red	coil			Band 2: 4-8 MHz
❑	L4-core	T25-2 toroid core	red 	toroid			Band 2: 4-8 MHz
❑	L5	2.1 uH 24T #30 0n T25-2 (14")	red	coil			Band 2: 4-8 MHz
❑	L5-core	T25-2 toroid core	red 	toroid			Band 2: 4-8 MHz
❑	L6	8 uH 49T #30 on T25-2 (22")	red	coil			Band 2: 4-8 MHz
❑	L6-core	T25-2 toroid core	red 	toroid			Band 2: 4-8 MHz
❑	L7	4 uH 38T #30 on T25-6 (18")	yellow	coil			Band 3: 8-16 MHz
❑	L7-core	T25-6 toroid core	yellow 	toroid			Band 3: 8-16 MHz
❑	L8	1.1 uH 20T #30 on T25-6 (11")	yellow	coil			Band 3: 8-16 MHz
❑	L8-core	T25-6 toroid core	yellow 	toroid			Band 3: 8-16 MHz
❑	L9	4 uH 38T #30 on T25-6 (18")	yellow	coil			Band 3: 8-16 MHz
❑	L9-core	T25-6 toroid core	yellow	toroid			Band 3: 8-16 MHz

							
❑	P100	header, 9-pin		header			Busses and Rails
❑	P101	header, 3-pin		header		Pins: 1=gnd; 2=+5 Vdc; 3=+12Vdc. From V9.0 J2	Busses and Rails
❑	P102	header,female, 2 pin		socket		2 pin socket provided for later connect to V9.0 RX's J3 (for eventual programmatic band switching, once the microcontroller is reprogrammed)	Bill of Materials
❑	R01	2.21 k 1/4W 1%	r-r-br-br-br 	1/4W	E-W		Busses and Rails
❑	R02	2.21 k 1/4W 1%	r-r-br-br-br 	1/4W	W-E		Busses and Rails
❑	R03	4.7 k 1/4 W 5%	y-v-r-gl 	1/4W	W-E		Busses and Rails
❑	R04	4.7 k 1/4 W 5%	y-v-r-gl 	1/4W	W-E		Busses and Rails
❑	R05	2.21 k 1/4W 1%	r-r-br-br-br 	1/4W	W-E		Busses and Rails
❑	R06	2.21 k 1/4W 1%	r-r-br-br-br 	1/4W	E-W		Busses and Rails
❑	T1	4T #30 trifilar BN43-2402 (7")		transformer			Transformers
❑	T1 wire	#30enameled magnetic wire		misc		3 lengths of #30, each 7" (18cm) long, should do OK	Transformers

❑	T1-core	BN43-2402		binocular core			Transformers
❑	T2	8T/2T bifilar BN43-2402 (10")		transformer			Transformers
❑	T2 wire	#30enameled magnetic wire		misc		primary: one 10" (25 cm) length; secondaries: two 5" (12.5 cm) length should do OK	Transformers
❑	T2-core	BN43-2402		binocular core			Transformers
❑	U1	FST3253 mux/demux switch	FST3253 	SOIC-16			Switches
❑	U2	FST3253 mux/demux switch	FST3253 	SOIC-16			Switches
❑	wire 1	#30enameled magnetic wire		misc			Band 1: 1.8-4 MHz
❑	wire 2	#30enameled magnetic wire		misc			Band 2: 4-8 MHz
❑	wire 3	#30enameled magnetic wire		misc			Band 3: 8-16 MHz
❑	wire 4	#30enameled magnetic wire		misc			Band 4: 16-30 MHz

Home Bill of Materials Busses and Rails Switches Transformers Band 1: 1.8-4 MHz Band 2: 4-8 MHz Band 3: 8-16 MHz Band 4: 16-30 MHz Band1a 6m Band2a 3.5-8 MHz Comments Revisions as of 1/16/2009 WB5RVZ Main Homepage