

pacemaker_bom_smt

Designator	Value	Notes
U1	TL072	8-SOIC, any similar or better opamp is fine
U2	LM339	14-SOIC
U3	LM555	8-SOIC, Fairchild recommended
U4	74HC14	14-SOIC
U5	74HC00	14-SOIC
U6	7805	TO-252
C1	0.1uF	0805, unless otherwise specified
C2	4.7nF	
C3	0.1uF	
C4	0.1uF	
C5	1uF	
C6	1uF	
C7	1uF	
C8	0.1uF	
C9	0.1uF	
C10	47uF/25V	6.3mmx5.33mm SMD
C11	47uF/25V	6.3mmx5.33mm SMD
C12	47uF/25V	6.3mmx5.33mm SMD
C13	47uF/25V	6.3mmx5.33mm SMD
C14	0.1uF	
C15	0.1uF	
C16	100pF	
C17	100pF	
C18	0.1uF	
R1	10k	0603, 1%, unless otherwise specified
R2	10k	
R3	10k	
R4	10k	
R5	10k	
R6	100	
R7	2.2k	
R8	2.2k	
R9	2.2k	
R10	2.2k	
R11	10k	
R12	10k	
R13	10k	
R14	10k	
R15	10k	
R16	10k	
R17	10k	
R18	10k	
R19	100k	
R20	100k	
R21	150k	
R22	220k	
R23	220k	
R24	1k	
R25	100k	
R26	12k	
R27	1k	
R28	51k	adjust for gain of VCA (smaller is less gain)
R29	2.2k	
R30	220k	
R31	10k	
R32	10k	
R33	10k	

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R34	470k	
R35	36k	
R36	36k	
R37	36k	
R38	36k	
R39	51k	
R40	51k	
R41	51k	
R42	51k	
R43	100k	
R44	100k	
R45	100k	
VR1	1MA	Alpha 9mm vertical pots
VR2	50kA	Smallbear SKU: 1012A
VR3	50kB	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-9mm-right-angle-pc-mount/
VR4	50kB	
VR5	50kA	
VR6	50kA	
VR7	50kB	
VR8	50kB	
S1	DPDT ON-ON-ON	Multicomp 2MD6T1B5M2RE
S2	DPDT ON-ON-ON	http://www.mcmelectronics.com/product/26-2160
D1	1N4148	SOT-23-3
D2	1N4148	any small signal diode will work
D3	1N4148	
D4	1N4148	
D5	MBR0530	SOD-123
D6	MBR0530	any high current shottkey will work
1/8" Jacks	EH-JACK35MMV	http://shop.erthenvar.com/collections/accessories/products/3-5mm-vertical-jacks
Headers	0.1"	female header example: Harwin M20-7820342 (Mouser) 0.1" SIP header, both male and female: 10 x 3P and 1 x 6P