

SEQUENTIAL VOLTAGE SOURCE MODEL 245

BILL OF MATERIALS REV 1.0

PCB1

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37	31		512-1N457

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
78K	R42	1	1% 1/4W	271-78.7K-RC
52K	R44	1	1% 1/4W	271-52.3K-RC
100K	R47, R53	2	1% 1/4W	271-100K-RC
10K	R48	1	1% 1/4W	271-10K-RC
33K	R49	1	1% 1/4W	271-33K-RC
68K	R55	1	1% 1/4W	271-68K-RC
4K7	R57, R75, R90, R105, R120	5	1% 1/4W	271-4.7K-RC
1K	R177, R179, R181, R183	4	1% 1/4W	271-1K-RC
4K99	R178, R180, R182, R184	4	1% 1/4W	271-4.99K-RC
10K-100K LINEAR	POT1 - POT23	23	16MM ANGLED	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	B1, B4, B5, B7, B8, B9, B11, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B22, B29	19	BANANA JACK RED	530-108-0902-1
	B2, B6, B10, B23, B24, B25, B26, B27, B28, B30, B31	11	BANANA JACK BLACK	530-108-0903-1
	B3	1	BANANA JACK WHITE	530-108-0901-1
	LED1, LED3, LED4, LED5, LED6, LED7	6	5MM RED LED	604-WP7113ID5V
	LED2	1	5MM BLUE LED	EBAY ITEM #281532603412
	PLD1	1	PLD 14 PIN (FEMALE)	517-929975-01-07-RK
	PLD2	1	PLD 30 PIN (FEMALE)	517-929975-01-15-RK
	PLD3	1	PLD 10 PIN (FEMALE)	517-929975-01-05-RK
SPDT (ON)-ON	SW1, SW2	2	TOGGLE SWITCH	108-1MS2T1B1M1QE-EVX
DPDT ON-ON	SW3, SW4, SW5, SW6	4	TOGGLE SWITCH	108-1MD1T1B1M1QE-EVX
		23	SMALL DAVIES KNOB	5164-1610AA
		1	BLUE SWITCH CAP	108-00357-EV
		5	RED SWITCH CAP	108-00323-EV

PCB2

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D1, D2, D3, D4, D5, D6, D38, D39, D40, D41	10		512-1N457
TL072	IC1	1		595-TL072IP
LM741	IC2, IC15, IC16, IC17, IC18	5		926-LM741CN/NOPB
CD4001	IC3, IC8, IC11, IC14	4		595-CD4001BE
CD4011	IC4, IC5	2		595-CD4011BE
TL071	IC6	1		595-TL071CP
LM311	IC7, IC9, IC10, IC12, IC13	5		926-LM311N/NOPB
7805	IC19	1		512-LM7805ACT
2N3906	Q1, Q2, Q3, Q4, Q11, Q15, Q19, Q23, Q27, Q31, Q32, Q33, Q34, Q35	14		610-2N3906
J201	Q5	1		106-J201
2N3904	Q7, Q8, Q9, Q10, Q12, Q13, Q14, Q16, Q17, Q18, Q20, Q21, Q22, Q24, Q25, Q26, Q28, Q29, Q30, Q36, Q37	21		610-2N3904
LS312	Q6	1	OR ANY MATCHED NPN	http://www.linearsystems.com

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
0.01uF	C1, C2, C7, C8, C9, C10, C12, C13, C15, C16, C18, C19, C21, C22	14	CERAMIC 5MM LS	81-DEBF33A103ZA2B
150nF	C4	1	FILM 5MM LS	871-B32529C154K289
100pF	C5, C6, C24, C25, C26, C27, C28	7	CERAMIC 5MM LS	81-DEA1X3D101JA2B
1000pF	C11, C14, C17, C20, C23, C29, C30	7	CERAMIC 5MM LS	81-DEBF33D102ZP2A
15uF	C3, C31, C32, C33, C34	5	TANTALUM SMD CASE D	74-TR3D156K035C0150
0.1uF	F1 - F22	22	CERAMIC 5MM LS	581-SA105E104M

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
10K	R1, R7, R13, R50, R56, R62, R63, R70, R73, R74, R80, R81, R88, R89, R95, R96, R103, R104, R110, R111, R118, R119, R125, R126, R134, R150, R152, R154, R164, R166, R172, R174, R175	33	1% 1/4W	271-10K-RC
4K7	R2, R4, R10, R12, R34, R35, R59, R77, R92, R107, R122, R171	12	1% 1/4W	271-4.7K-RC
1K5	R3, R23, R24	3	1% 1/4W	271-1.5K-RC
470R	R5, R11	2	1% 1/4W	271-470-RC
15K	R6, R17, R19, R20, R31, R160	6	1% 1/4W	271-15K-RC
6K8	R8, R9, R15, R25, R135, R138, R141, R156	8	1% 1/4W	271-6.8K-RC
100R	R14, R69	2	1% 1/4W	271-100-RC
330K	R16	1	1% 1/4W	271-330K-RC
220R	R18	1	1% 1/4W	271-220-RC
180K	R21	1	1% 1/4W	271-180K-RC
150K	R22, R27, R29, R147, R148, R149, R151, R153, R155, R165, R167	11	1% 1/4W	271-150K-RC
100K	R26, R30, R33, R41, R45, R46, R51, R52, R54, R60, R64, R78, R82, R93, R97, R108, R112, R123, R128, R159, R168, R173	22	1% 1/4W	271-100K-RC
68K	R28, R39	2	1% 1/4W	271-68K-RC
47K	R32, R43, R65, R66, R83, R84, R98, R99, R113, R114, R129, R130	12	1% 1/4W	271-47K-RC
22K	R36, R40, R71, R72	4	1% 1/4W	271-22K-RC
27K	R37	1	1% 1/4W	271-27K-RC
1M	R38	1	5% 1/4W	291-1M-RC
1K	R58, R67, R76, R85, R87, R91, R100, R102, R106, R115, R117, R121, R127, R131, R133, R136, R139, R142, R157, R163	20	1% 1/4W	271-1K-RC
330R	R61, R79, R94, R109, R124	5	1% 1/4W	271-330-RC
470K	R68, R86, R101, R116, R132	5	1% 1/4W	271-470K-RC
3K3	R137, R140, R143, R158	4	1% 1/4W	271-3.3K-RC
33K	R144, R145, R146, R161, R162, R170	6	1% 1/4W	271-33K-RC
300K	R169	1	1% 1/4W	271-300K-RC
49K9	R176	1	1% 1/4W	271-49.9K-RC
100K	TR1	1	SINGLE-TURN	858-25PR100KLF
5K	TR2	1	SINGLE-TURN	858-25PR5KLF

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	PBD1	1	PLD 14 PIN (MALE)	517-929836-01-07
	PBD2	1	PLD 30 PIN (MALE)	517-929836-09-16
	PBD3	1	PLD 10 PIN (MALE)	517-929836-01-05-RK
		1	POWER CONNECTOR	587-306-50-010