

QUAD FUNCTION GENERATOR MODEL 281**BILL OF MATERIALS REV 1.1****PCB1****SEMICONDUCTORS**

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D1, D2, D4, D6, D7, D8, D10, D11, D13, D15, D16, D17	12		512-1N457

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
47000pF	C1, C3, C5, C7	4	CERAMIC 5MM LS	581-SA105E473MAR
4.7uF	C01, C02	2	TANTALUM AXIAL	74-173D475X9035WWE3

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
47K	R1, R2, R4, R5, R19, R20, R22, R23	8	5% 1/4W	291-47K-RC
4M7	R3, R16, R21, R34	4	5% 1/4W	291-4.7M-RC
49K9 1%	R6, R7, R8, R9, R10, R11, R12, R13, R24, R25, R26, R27, R28, R29, R30, R31	16	1% 1/4W	271-49.9K-RC
100K	R14, R17, R32, R35	4	5% 1/4W	291-100K-RC
10K	R15	1	5% 1/4W	291-10K-RC
1K5	R18, R36	2	5% 1/4W	291-1.5K-RC
4K7	R37	1	5% 1/4W	291-4.7K-RC
2R2	R01, R02	2	5% 1/2W	293-2.2-RC
B10K	POT1, POT2, POT3, POT4, POT5, POT6, POT7, POT8	8	16MM POTENTIOMETER	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/
B50K	POT9, POT10	2	9MM POTENTIOMETER	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-9mm-right-angle-pc-mount/

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
		8	BANANA JACK BLACK	530-108-0903-1
		4	BANANA JACK ORANGE	530-108-0906-1
		4	BANANA JACK RED	530-108-0902-1
		6	BANANA JACK BLUE	530-108-0910-1
SPDT ON-OFF-ON	SW1, SW2, SW4, SW5	4	TOGGLE SWITCH	611-7103-002
SPDT ON-ON	SW3, SW6, SW7	3	TOGGLE SWITCH	611-7101-002
	LED2, LED3, LED6, LED7, LED9	5	3MM RED LED	630-HLMP-K101
	LED1, LED4, LED5, LED8	4	3MM ORANGE LED	630-HLMP-K401
	IDC-A, IDC-B	2	PLD 26 PIN (MALE)	517-929836-01-26
		4	RED SWITCH CAP	
		2	YELLOW SWITCH CAP	
		1	BLACK SWITCH CAP	
		1	POWER CONNECTOR	587-306-50-010
		1	ROGAN KNOBS SET	http://www.weedywhizz.com/buchla-cases-and-parts/buchla-diy-parts/knob-sets/
		1	FRONTPANEL	http://siddharthianinnovations.bigcartel.com/product/280-front-panel-for-diy-kit

PCB2&3**SEMICONDUCTORS**

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D1, D2, D3, D5, D6	10		512-1N457
TL064	IC1, IC5	4		595-TL064IN
CD4016	IC2, IC6	4		595-CD4016BE
CD4001	IC3, IC7	4		595-CD4001BE
CA3080	IC4, IC8	4		eBay
LM741	IC9	2		926-LM741CN/NOPB
1N5240	Z4, Z7	4		512-1N5240B
2N3906	Q1A, Q1B, Q4A, Q4B	8		610-2N3906
J201	Q2, Q5	4		106-J201
2N3904	Q3, Q6	4		610-2N3904

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
220nF	C1, C4	4	FILM 10MM LS	667-ECQ-E2224KF
47000pF	C2, C5	4	CERAMIC 5MM LS	581-SA105E473MAR
1uF	C3	2	TANTALUM AXIAL	74-173D105X9035VWE3
0.1uF	C6, C7	4	CERAMIC 5MM LS	581-SA105E104M

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
47K	R1, R6, R7, R13, R19, R20, R35, R39, R46, R52, R53, R71	24	5% 1/4W	291-47K-RC
15K	R2, R36	4	5% 1/4W	291-15K-RC
4K7	R3, R17, R21, R25, R26, R37, R50, R54, R58, R59	20	5% 1/4W	291-4.7K-RC
100K	R4, R5, R33, R38, R41, R66	12	5% 1/4W	291-100K-RC
100K 1%	R68	2	1% 1/4W	271-100K-RC
5K6	R8, R40	4	5% 1/4W	291-5.6K-RC
1K 1%	R9, R10, R42, R43, R70	10	1% 1/4W	271-1K-RC
4M7	R11, R44	4	5% 1/4W	291-4.7M-RC
10K	R12, R24, R28, R45, R57, R61	12	5% 1/4W	291-10K-RC
680R	R15, R16, R18, R48, R49, R51	12	5% 1/4W	291-680-RC
22K	R22, R27, R32, R55, R60, R65	12	5% 1/4W	291-22K-RC
470K	R23, R56	4	5% 1/4W	291-470K-RC
20K 1%	R29, R62, R69	6	1% 1/4W	271-20K-RC
49K9 1%	R30, R63	4	1% 1/4W	271-49.9K-RC
2M2	R31, R64	4	5% 1/4W	291-2.2M-RC
470R	R34, R67	4	5% 1/4W	291-470-RC
20K	TR1, TR2	4	ANGLED SINGLE TURN	652-3362X-1-203LF

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	IDC-A	2	PLD 26 PIN (MALE)	517-929836-01-26
		2	26PIN RIBBON CABLE	EBAY ITEM # 231938545446