

QUAD VOLTAGE CONTROLLED ENVELOPE GENERATOR MODEL 284

BILL OF MATERIALS REV 1.0

PCB1

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D3, D8, D13, D18	4		512-1N457
TL074	IC6	1		595-TL074CN

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
10nF	C6, C7, C12, C13, C18, C19, C24, C25	8	FILM 5MM LS	871-B32529C103J
0.1uF	F6	1	CERAMIC 5MM LS	581-SA105E104M

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
56K	R43, R44, R45, R46, R119, R120, R121, R122, R195, R196, R197, R198, R271, R272, R273, R274	16	1% 1/4W	271-56K-RC
4M7	R47, R123, R199, R275	4	4% 1/4W	291-4.7M-RC
33K	R48, R49, R124, R125, R200, R201, R276, R277	8	1% 1/4W	271-33K-RC
1K5	R50, R51, R126, R127, R202, R203, R278, R279	8	1% 1/4W	271-1.5K-RC
100K	R54, R130, R206, R282	4	1% 1/4W	271-100K-RC
10K	POT1, POT2, POT3, POT4, POT5, POT6, POT7, POT8, POT9, POT10, POT11, POT12, POT13, POT14, POT15, POT16, POT17, POT18, POT19, POT20	20	16MM	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	PBD1, PBD2	2	PLD 24 PIN (MALE)	517-929836-01-12-RK
DPDT ON-ON	SW1, SW2, SW3, SW4	4	TOGGLE SWITCH	633-M202201
	LED1, LED2, LED3, LED4	4	RED 3MM LED	630-HLMP-K101
		4	LED LENS	534-8662
		20	SMALL DAVIES KNOB	5164-1610AA
		8	BANANA JACK RED	530-108-0902-1
		12	BANANA JACK BLACK	530-108-0903-1
		4	RED SWITCH CAP	

PCB2

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
THAT340	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	8		887-340P14-U
2N3906	Q9, Q10, Q11, Q12, Q19, Q21, Q22, Q24, Q25, Q26, Q27, Q34, Q36, Q37, Q39, Q40, Q41, Q42, Q49, Q51, Q52, Q54, Q55, Q56, Q57, Q64, Q66, Q67	28		610-2N3906
LS3958	Q13, Q20, Q28, Q35, Q43, Q50, Q58, Q65	8	2N3958	eBay
PN3565	Q14, Q15, Q16, Q17, Q18, Q23, Q29, Q30, Q31, Q32, Q33, Q38, Q44, Q45, Q46, Q47, Q48, Q53, Q59, Q60, Q61, Q62, Q63, Q68	24		610-PN3565
12uHn	L1	1		542-77F120K-RC
TL074	IC2, IC3, IC4, IC5	4		595-TL074CN
SIM1-1524S-DIL8	IC0	1	15V to 24V DC-DC CONVERTER	http://www.digialo.de/products/167426/DC-DC-Wandler-1W-Sim1-1524s-Dil8.html?page=1&sort=1a
1N457	D1, D2, D4, D5, D6, D7, D9, D10, D11, D12, D14, D15, D16, D17, D19, D20	16		512-1N457

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
100uF	C1, C3, C4	3	ELECTROLYTIC 3.5MM LS	667-ECA-1JM101
220uF	C2	1	ELECTROLYTIC 3.5MM LS	667-EEU-FC1V221L
100nF	C5, C10, C11, C16, C17, C22, C23, C28	8	FILM 5MM LS	871-B32529C3104J189
10nF	C8, C9, C14, C15, C20, C21, C26, C27	8	FILM 5MM LS	871-B32529C103J
0.1uF	F1, F2, F3, F4, F5, F7, F8, F9	8	CERAMIC 5MM LS	581-SA105E104M

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
100K	R1, R2, R7, R75, R77, R78, R83, R151, R153, R154, R159, R227, R229, R230, R235, R303	16	1% 1/4W	271-100K-RC
47K	R3, R6, R25, R27, R58, R60, R69, R72, R79, R82, R101, R103, R134, R136, R145, R148, R155, R158, R177, R179, R210, R212, R221, R224, R231, R234, R253, R255, R286, R288, R297, R300	32	1% 1/4W	271-47K-RC
1K	R4, R12, R28, R34, R35, R38, R39, R53, R57, R64, R70, R80, R88, R104, R110, R111, R114, R115, R129, R133, R140, R146, R156, R164, R180, R186, R187, R190, R191, R205, R209, R216, R222, R232, R240, R256, R262, R263, R266, R267, R281, R285, R292, R298	44	1% 1/4W	271-1K-RC
680K	R5, R15, R26, R31, R56, R81, R91, R102, R107, R132, R157, R167, R178, R183, R208, R233, R243, R254, R259, R284	20	1% 1/4W	271-680-RC
22K	R8, R9, R11, R13, R14, R16, R18, R19, R22, R30, R84, R85, R87, R89, R90, R92, R94, R95, R98, R106, R160, R161, R163, R165, R166, R168, R170, R171, R174, R182, R236, R237, R239, R241, R242, R244, R246, R247, R250, R258	40	1% 1/4W	271-22K-RC
15K	R10, R17, R20, R68, R86, R93, R96, R144, R162, R169, R172, R220, R238, R245, R248, R296	16	1% 1/4W	271-15K-RC
680R	R21, R23, R97, R99, R173, R175, R249, R251	8	1% 1/4W	271-680-RC
10K	R24, R32, R71, R100, R108, R147, R176, R184, R223, R252, R260, R299	12	1% 1/4W	271-10K-RC
68K	R29, R36, R40, R65, R105, R112, R116, R141, R181, R188, R192, R217, R257, R264, R268, R293	16	1% 1/4W	271-68K-RC
39K	R33, R37, R109, R113, R185, R189, R261, R265	8	1% 1/4W	271-39K-RC
6K8	R41, R42, R55, R67, R76, R117, R118, R131, R143, R152, R193, R194, R207, R219, R228, R269, R270, R283, R295, R304	20	1% 1/4W	271-6.8K-RC
3K3	R52, R73, R128, R149, R204, R225, R280, R301	8	1% 1/4W	271-3.3K-RC
33K	R59, R135, R211, R287	4	1% 1/4W	271-33K-RC
2M2	R61, R137, R213, R289	4	5% 1/4W	291-2.2M-RC
150K	R62, R138, R214, R290	4	1% 1/4W	271-150K-RC
220R	R63, R66, R139, R142, R215, R218, R291, R294	8	1% 1/4W	271-220-RC
5K6	R74, R150, R226, R302	4	1% 1/4W	271-5.6K-RC
20K	TR1, TR2, TR3, TR4, TR5, TR6, TR7, TR8	8	SINGLE TURN	858-25PR20KLF

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	PLD1, PLD2	2	PLD 24 PIN (FEMALE)	517-929975-01-12-RK
		1	POWER CONNECTOR	587-306-50-010