

Bill Of Materials

<i>Ite m #</i>	<i>Quantity</i>	<i>Part Ref</i>	<i>Value</i>	<i>Description</i>	<i>Mfg</i>	<i>Mfg Part Number</i>
1	1	C1	100 nF	100 nF, 275 VAC, Film, X Class	Kemet	R46KI310000M1K
2	1	C2	68 µF	68 µF, 400 V, High Voltage Al Electrolytic, (30 mm x 14.5 mm)	United Chemi-Con	EPAG400VB68RM14X30LL
3	1	C3	1.8 nF	1.8 nF, 1 kV, High Voltage Ceramic	Panasonic	ECK-D3A182KBN
4	1	C4	0.1 µF	0.1 µF, 16 V, Ceramic, X7R	TDK	C1005X7R1C104K
5	1	C5	47 µF	47 µF, 10 V, Electrolytic, Gen Purpose, 1040 mΩ, (11 mm x 5 mm)	United Chemi-Con	KME10VB47RM5X11LL
6	1	C6	2.2 nF	2.2 nF, 250 VAC, Ceramic, Y Class	TDK	CD12-E2GA222MYNS
7	2	C7, C8	560 pF	560 pF, 50 V, Ceramic, C0G	TDK	FK18C0G1H561J
8	1	C9	27 pF	27 pF, 100 V, Ceramic, C0G	Epcos	B37979N1270J000
9	1	C10	10 µF	10 µF, 50 V, Electrolytic, Gen Purpose, 1050 mΩ, (11.5 mm x 5 mm)	Panasonic	ECA-1HHG100
10	1	C11	680 µF	680 µF, 10 V, Electrolytic, Super Low ESR, 56 mΩ, (15 mm x 8 mm)	United Chemi-Con	EKZE100ELL681MH15D
11	2	C12, C15	100 µF	100 µF, 10 V, Electrolytic, Low ESR, 500 mΩ, (11.5 mm x 5 mm)	United Chemi-Con	ELXZ100ELL101MEB5D
12	2	C13, C14	2200 µF	2200 µF, 10 V, Electrolytic, Super Low ESR, 21 mΩ, (20 mm x 12.5 mm)	United Chemi-Con	EKZE100ELL222MK20S
13	1	C16	330 µF	330 µF, 25 V, Electrolytic, Super Low ESR, 56 mΩ, (15 mm x 8 mm)	United Chemi-Con	EKZE250ELL331MH15D
14	1	C17	100 µF	100 µF, 25 V, Electrolytic, Low ESR, 250 mΩ, (11.5 mm x 6.3 mm)	United Chemi-Con	ELXZ250ELL101MFB5D
15	1	C18	680 nF	680 nF, 50 V, Ceramic, X7R	Murata	RPER71H684K3K1C03B
16	4	D1, D2, D3, D4	1N4006	800 V, 1 A, Standard Recovery, DO-41	Vishay	1N4006
17	1	D5	1N4937	600 V, 1 A, Fast Recovery, 200 ns, DO-41	Vishay	1N4937
18	1	D6	1N914	100 V, 0.3 A, Fast Recovery, 4 ns, DO-35	Vishay	1N914
19	1	D7	SB150	50 V, 1 A, Schottky, DO-41	Vishay	SB150
20	1	D8	SB550	50 V, 5 A, Schottky, DO-201AD	Vishay	SB550
21	1	D9	UF4003	200 V, 1 A, Ultrafast Recovery, 50 ns, DO-41	Vishay	UF4003
22	1	F1	1 A	250 VAC, 1 A, Radial TR5, Time Lag Fuse	Littelfuse / Wickmann(R)	37411000410
23	1	HS1		57.3 mm x 20 mm. Aluminum Alloy (3003 OR 5052), 1.6 mm thickness. Heatsink for use with Device U1.	Custom	
24	1	HS2		29.5 mm x 20 mm. Aluminum Alloy (3003 OR 5052), 1.6 mm thickness. Heatsink for use with Diode D8.	Custom	
25	1	L1	6 mH	6 mH, 1.6 A	Panasonic	ELF18N016
26	2	L2, L4	3.3 µH	3.3 µH, 2.66 A	Bourns Inc.	RL822-3R3K-RC
27	1	L3	3.3 µH	3.3 µH, 5.5 A	Bourns Inc.	RL622-3R3K-RC
28	1	R1	51 kΩ	51 kΩ, 5 %, 2 W, Metal Oxide Film	Generic	
29	1	R2	13 Ω	13 Ω, 5 %, 0.25 W, Carbon Film	Generic	
30	2	R3, R4	9.53 MΩ	9.53 MΩ, 1 %, 0.25 W, Metal Film	Generic	
31	1	R5	8.87 kΩ	8.87 kΩ, 1 %, 0.125 W, Metal Film	Generic	

32	2	R6, R7	2 M Ω	2 M Ω , 1 %, 0.25 W, Metal Film	Generic	
33	1	R8	6.8 Ω	6.8 Ω , 5 %, 0.125 W, Carbon Film	Generic	
34	2	R9, R10	18 Ω	18 Ω , 5 %, 0.25 W, Carbon Film	Generic	
35	1	R11	390 Ω	390 Ω , 5 %, 0.25 W, Carbon Film	Generic	
36	1	R12	1050 Ω	1050 Ω , 1 %, 0.125 W, Metal Film	Generic	
37	1	R13	1 k Ω	1 k Ω , 5 %, 0.125 W, Carbon Film	Generic	
38	2	R14, R15	4.99 k Ω	4.99 k Ω , 1 %, 0.125 W, Metal Film	Generic	
39	1	RT1	16 Ω	NTC Thermistor 16 Ω , 1.7 A	Thermometrics	CL180
40	1	T1	EE25	NC-2H (Nicera) or Equivalent Core Material See Transformer Construction's Materials List for complete information	TDK	PC40EL25-Z
41	1	U1	TOP264EG	TOPSwitch-JX, TOP264EG, eSIP-7C	Power Integrations	TOP264EG
42	1	U2	PS2501-1-K-A	Optocoupler PS2501-1-K-A, 80 V, CTR 300 - 600 %, 4-DIP	CEL	PS2501-1-K-A
43	1	U3	TL431CLPM	2.495 V, Shunt Regulator IC, 2 %, TO-92	Texas Instruments	TL431CLPM
44	1			52 mm ² area on Copper PCB. 2 oz (70 μ m) thickness. Heatsink for use with Diode D9.	Custom	
45	1			52 mm ² area on Copper PCB. 2 oz (70 μ m) thickness. Heatsink for use with Diode D7.	Custom	