

Bill Of Materials

Item #	Quantity	Part Ref	Value	Description	Mfg	Mfg Part Number
1	1	C1	100 nF	100 nF, 275 VAC, Film, X Class	Kemet	R46KI310000M1K
2	1	C2	68 μ F	68 μ F, 400 V, High Voltage Al Electrolytic, (30 mm x 14.5 mm)	United Chemi-Con	EPAG400VB68RM14X30LL
3	1	C3	2.2 nF	2.2 nF, 1 kV, High Voltage Ceramic	NIC Components Corp	NCD222K1KVY5FF
4	1	C4	0.1 μ F	0.1 μ F, 16 V, Ceramic, X7R	TDK	C1005X7R1C104K
5	1	C5	47 μ F	47 μ F, 10 V, Electrolytic, Gen Purpose, 1040 m Ω , (11 mm x 5 mm)	United Chemi-Con	KME10VB47RM5X11LL
6	2	C6, C7	470 pF	470 pF, 50 V, Ceramic, C0G	TDK	FK18C0G1H471J
7	1	C8	10 μ F	10 μ F, 50 V, Electrolytic, Gen Purpose, 1050 m Ω , (11.5 mm x 5 mm)	Panasonic	ECA-1HHG100
8	2	C9, C11	2700 μ F	2700 μ F, 16 V, Electrolytic, Super Low ESR, 18 m Ω , (30 mm x 12.5 mm)	United Chemi-Con	EKZE160ELL272MK30S
9	2	C10, C12	100 μ F	100 μ F, 10 V, Electrolytic, Low ESR, 500 m Ω , (11.5 mm x 5 mm)	United Chemi-Con	ELXZ100ELL101MEB5D
10	1	C13	680 nF	680 nF, 50 V, Ceramic, X7R	Murata	RPER71H684K3K1C03B
11	4	D1, D2, D3, D4	1N4006	800 V, 1 A, Standard Recovery, DO-41	Vishay	1N4006
12	1	D5	1N4937	600 V, 1 A, Fast Recovery, 200 ns, DO-41	Vishay	1N4937
13	1	D6	1N914	100 V, 0.3 A, Fast Recovery, 4 ns, DO-35	Vishay	1N914
14	2	D7, D8	SB340	40 V, 3 A, Schottky, DO-201AD	Vishay	SB340
15	1	F1	1 A	250 VAC, 1 A, Radial TR5, Time Lag Fuse	Littelfuse / Wickmann(R)	37411000410
16	1	HS1		85.7 mm x 20 mm. Aluminum Alloy (3003 OR 5052), 1.6 mm thickness. Heatsink for use with Device U1.	Custom	
17	1	L1	6 mH	6 mH, 1.6 A	Panasonic	ELF18N016
18	2	L2, L3	3.3 μ H	3.3 μ H, 2.66 A	Bourns Inc.	RL822-3R3K-RC
19	1	R1	39 k Ω	39 k Ω , 5 %, 2 W, Metal Oxide Film	Generic	
20	1	R2	13 Ω	13 Ω , 5 %, 0.25 W, Carbon Film	Generic	
21	2	R3, R4	2 M Ω	2 M Ω , 1 %, 0.25 W, Metal Film	Generic	
22	1	R5	6.8 Ω	6.8 Ω , 5 %, 0.125 W, Carbon Film	Generic	
23	2	R6, R7	22 Ω	22 Ω , 5 %, 0.25 W, Carbon Film	Generic	
24	1	R8	1050 Ω	1050 Ω , 1 %, 0.125 W, Metal Film	Generic	
25	1	R9	1 k Ω	1 k Ω , 5 %, 0.125 W, Carbon Film	Generic	
26	2	R10, R11	4.99 k Ω	4.99 k Ω , 1 %, 0.125 W, Metal Film	Generic	
27	1	RT1	16 Ω	NTC Thermistor 16 Ω , 1.7 A	Thermometrics	CL180
28	1	T1	EE25	NC-2H (Nicera) or Equivalent Core Material See Transformer Construction's Materials List for complete information	TDK	PC40EL25-Z
29	1	U1	TOP264EG	TOPSwitch-JX, TOP264EG, eSIP-7C	Power Integrations	TOP264EG
30	1	U2	PS2501-1-K-A	Optocoupler PS2501-1-K-A, 80 V, CTR 300 - 600 %, 4-DIP	CEL	PS2501-1-K-A
31	1	U3	TL431CLPM	2.495 V, Shunt Regulator IC, 2 %, TO-92	Texas Instruments	TL431CLPM
32	1			228 mm ² area on Copper PCB. 2 oz (70 μ m) thickness. Heatsink for use with Diode D8.	Custom	
33	1			228 mm ² area on Copper PCB. 2 oz (70 μ m) thickness. Heatsink for use with Diode D7.	Custom	