

Bill Of Materials

Item #	Quantity	Part Ref	Value	Description	Mfg	Mfg Part Number
1	2	C1, C2	4,7 μ F	4,7 μ F, 400 V, High Voltage Al Electrolytic, 67726 m Ω , (16 mm x 10 mm)	Nippon Chemi-Con	ESMG401ELL4R7MJ16S
2	1	C3	10 μ F	10 μ F, 16 V, Electrolytic, Gen Purpose, 1060 m Ω , (11 mm x 5 mm)	United Chemi-Con	KME16VB10RM5X11LL
3	1	C4	2,2 nF	2,2 nF, 250 VAC, Ceramic, Y Class	Vishay	440LD22-R
4	1	C5	470 pF	470 pF, 100 V, Ceramic, C0G	Epcos	B37979G5471J000
5	1	C6	820 μ F	820 μ F, 25 V, Electrolytic, Super Low ESR, 22 m Ω , (25 mm x 10 mm)	United Chemi-Con	KZE25VB821MJ25LL
6	1	C7	100 μ F	100 μ F, 16 V, Electrolytic, Low ESR, 250 m Ω , (11,5 mm x 6,3 mm)	United Chemi-Con	LXZ16VB101MF11LL
7	1	C8	100 nF	100 nF, 50 V, Ceramic, X7R	Murata	RPER71H104K2P1A03B
8	4	D1, D2, D3, D4	1N4006	800 V, 1,00 A, Standard Recovery, DO-41	Vishay	1N4006
9	1	D5	FR106	800 V, 1,00 A, Fast Recovery, 250 ns, DO-41	Diodes Inc.	FR106
10	1	D6	SB160	60 V, 1,00 A, Schottky, DO-41	Vishay	SB160
11	1	F1	1 A	265 VAC, 1 A, Radial TR5, Time Lag Fuse	Littelfuse / Wickmann(R)	37411000410
12	1	L1	6 mH	6 mH, 1,6 A	Panasonic	ELF18N016
13	1	L2	3,3 μ H	3,3 μ H, 2,66 A	Toko	822LY-3R3M
14	2	R1, R2	4,7 M Ω	4,7 M Ω , 5 %, 0,25 W, Carbon Film	Generic	
15	1	R3	22 Ω	22 Ω , 5 %, 0,25 W, Carbon Film	Generic	
16	1	R4	210 Ω	210 Ω , 1 %, 0,125 W, Metal Film	Generic	
17	1	R5	1 k Ω	1 k Ω , 5 %, 0,125 W, Carbon Film	Generic	
18	1	R6	43,2 k Ω	43,2 k Ω , 1 %, 0,125 W, Metal Film	Generic	
19	1	R7	11,3 k Ω	11,3 k Ω , 1 %, 0,125 W, Metal Film	Generic	
20	1	T1	E20/10/6 (EF20)	NC-2H (Nicera) or Equivalent Core Material See Transformer Construction's Materials List for complete information	Epcos	B66311-G-X127
21	1	U1	TNY278PN	TinySwitch-III, TNY278PN, DIP-8	Power Integrations	TNY278PN
22	1	U2	PC817D	Optocoupler PC817D, 35 V, CTR 300 - 600 %, 4-DIP	Sharp	PC817D
23	1	U3	TL431	2,495 V, Shunt Regulator IC, 2 %, TO-92	ON Semiconductor	TL431
24	1	VR1	P6KE200A	200 V, 5 W, 5 %, DO-204AC, TVS	Vishay	P6KE200A
25	1			52 mm ² area on Copper PCB. 2 oz (70 μ m) thickness. Heatsink for use with Device U1.	Custom	
26	1			80 mm ² area on Copper PCB. 2 oz (70 μ m) thickness. Heatsink for use with Diode D6.	Custom	