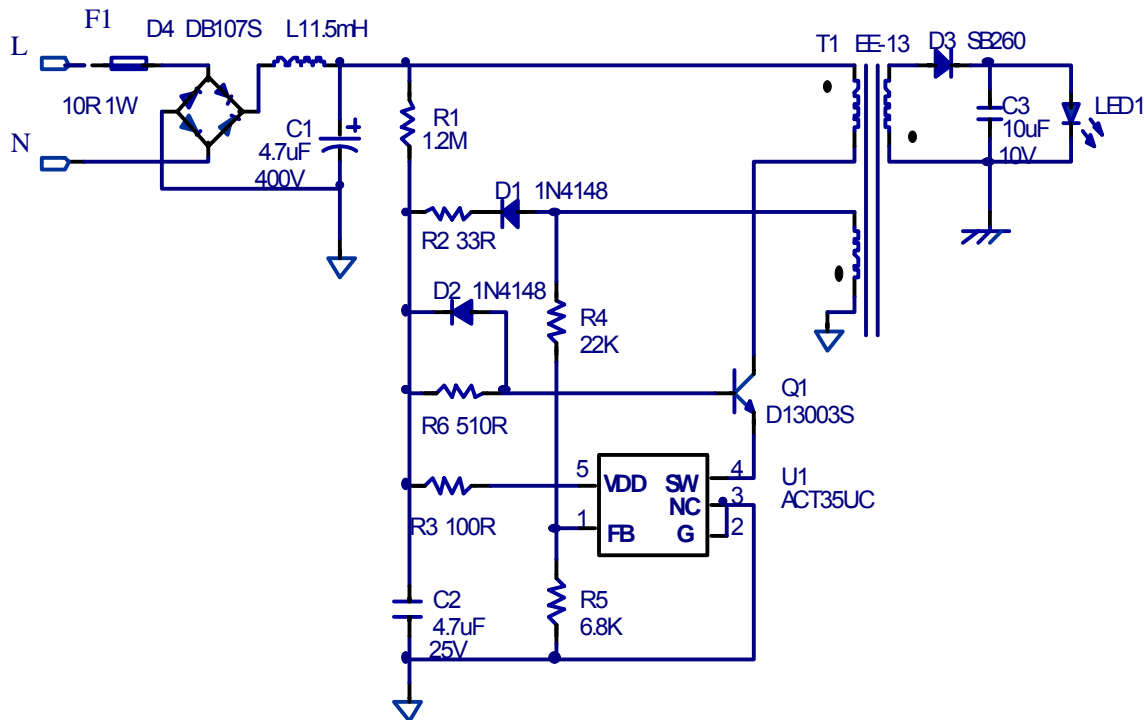


1. SCHEMATICS

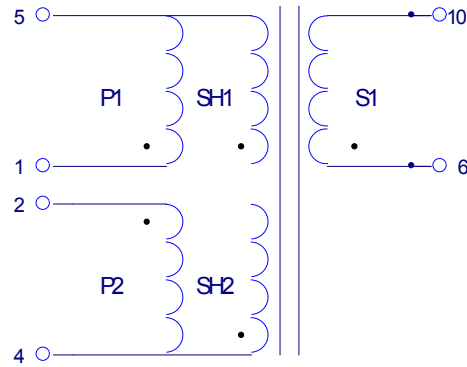


2. BILL OF MATERIALS

Item	Reference	Description	QTY	Manufacturer	Remark
1	C1	Capacitor, Electrolytic, 4.7uF/400V, 8x11.5mm	1	KSC	
2	C2	Capacitor, Ceramic, 4.7uF/25V, 1210, SMD	1	POE	
3	C3	Capacitor, , Ceramic, 10uF/10V, 1210, SMD	1	POE	
4	D4	Bridge, 1000V 1A, DB107S (1000V 0.5A MB10S), SMD	1	Good-Ark	
5	D1,2	Diode, Switching, 75V/150mA 1N4148 Milimelf, SMD	2	Good-Ark	
6	D3	Diode, schottky, 60V/2A, SB260, SMD	1	Good-Ark	
7	FR1	Fusible Resistor, 1W, 10 ohm, 5%, DIP	1	TY-OHM	
8	L1	Axial Inductor, 1.5mH, 0307, DIP	1	Amode Tech	
9	PCB1	PCB, L*W*T= ϕ 22. 8x15mm, FR-4 Rev:A	1	TY-OHM	
10	Q1	Transistor, NPN, 600V, 1.5A, D13002S, TO-92	1	Hua Wei	
11	R1	Meter Film Resistor, 1.2M ohm, 1206, 5%	1	TY-OHM	
12	R2	Meter Film Resistor, 33 ohm, 0805, 5%	1	TY-OHM	
13	R3	Meter Film Resistor, 100 ohm, 0805, 5%	1	TY-OHM	
14	R4	Meter Film Resistor, 22K ohm, 0805, 5%	1	TY-OHM	
15	R5	Meter Film Resistor, 6.8K ohm, 0805, 5%	1	TY-OHM	
16	T1	Transformer, Lp=1.7mH, EFD12.2	1	Amode Tech	
17	U1	IC, ACT35AUC, SOT23-5	1	Active-Semi.	

3. TRANSFORMER SPECIFICATION

3.1. Schematics

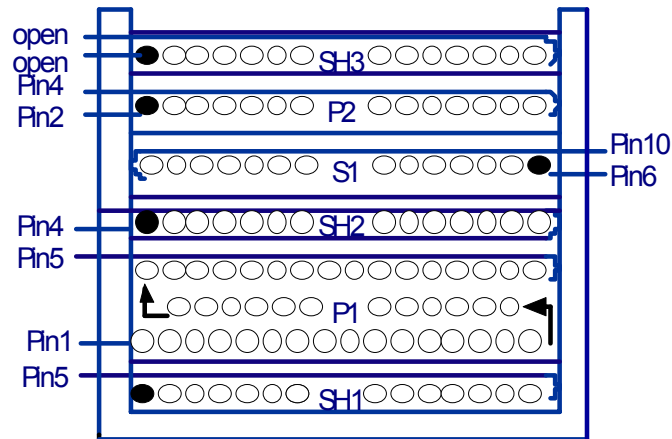


3.2. Build-up Table

Winding	Terminal		Turns	Wire			Insulation	
	Start	Finish		Type	Size*QTY	Layer	Thick/Wide	Layer
SH1	open	5	10	2UEW	0.15Φ*4	1	25u/8.5mm	2
P1	1	5	100	2UEW	0.15Φ*1	2	25u/8.5mm	2
SH2	4	open	10	2UEW	0.15Φ*4	1	25u/8.5mm	2
S1	6(Leaping)	10(Leaping)	13	2UEW	0.25Φ*1	2	25u/8.5mm	2
P2	2	4	35	2UEW	0.15Φ*1	1	25u/8.5mm	2
SH3	open	open	10	2UEW	0.15Φ*4	1	25u/8.5mm	2

Note: SH1 & SH2 are shielding, P1 & P2 are primary and S1 is secondary

3.3. Build-up Diagram



3.4. Electrical Specifications

Item	Description	Condition	Limits
1	Electrical Strength	50Hz, 1 minute, from primary and secondary	3000 Vac
2	P1 Inductance	Inductance between pins 1 and 2 at 1Vac & 1kHz	1.7mH ± 7%
3	P1 Leakage Inductance	Inductance between pins 1 and 5 with pins 2-4 and 6-10 shorted	75μH