

Product Overview

RM9003B is a control chip driven by the constant current from single-channel LED. It can directly drive high-voltage LED string light. And the output current is set to 5mA ~ 80mA by the external SENSE resistor, keeping the output current at the set value.

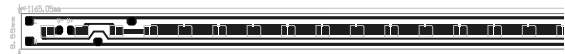
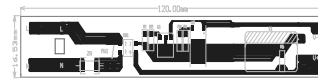
RM9003B has a simple system structure with very few peripherals. And the peripheral circuit works without magnetic components. It applies multichip in parallel or in series, and these chips can share PCB board with LED. What makes it more convenient is that the LED current can be set outside.

RM9003B has no EMI problem with its application line for that it is equipped with built-in HV MOS of 600V, and it has the temperature adjusting ability.

RM9003B is available in the package of ESOP-8, SOT-89, and TO-252.

System Specification: 18W/60mA PCB:

Input Voltage	220Vac
Output Current	60mA
Output Voltage	258V
CC tol.	<±3%
Efficiency	>85%
PF	>0.6
Topological Structure	high-voltage linear



Typical Applications:

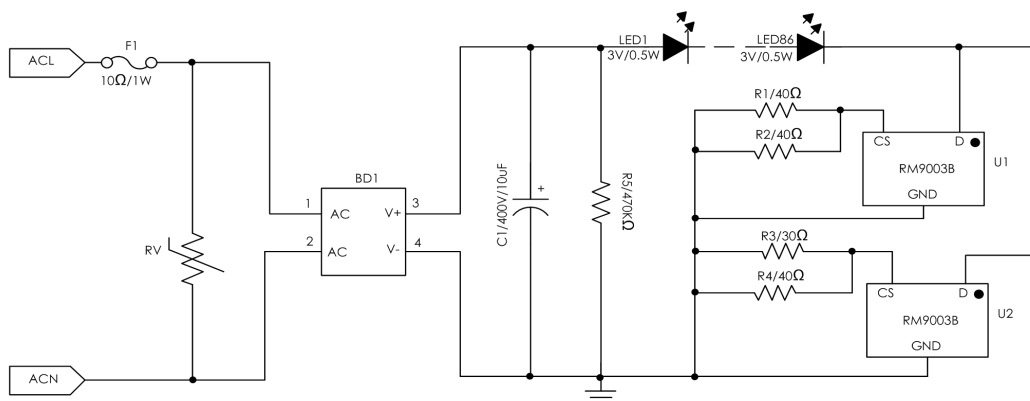


Figure 1 The schematic diagram of the system application

BOM of the system:

Tag Number	Part Type	Specification	Package Dimensions	Quantity	Manufacturer
U1	IC	RM9003B	SOT89-3	1	Reactor
U2	IC	RM9003B	TO-252	1	Reactor
F1	Anti-surge Resistor	10R/1W	SMD	1	
RV	Varistor	7D471	DIP	1	
DB1	Bridge Rectifier	MB6S	SMD	1	
C1	electrolytic capacitor	10uF/400V	DIP	1	
R1,R2	Chip Resistor	40R/1%	0805	2	
R3,R4	Chip Resistor	30R/1%	0805	2	
R5	Chip Resistor	470K/5%	1206	1	
LED	LED	3.0V/0.5W	Package 2835	86	
power strip	16.5mmX120mm Aluminum-based Board		1.0mm in thickness	1	
Light Bar	9.5mm × 1165mm Aluminum-based Board		1.0mm in thickness	1	