## Product Overview

**RM9005D** is a control chip driven by the constant current from dual-channel LED. It can directly drive high-voltage LED string light. And the output current is set to 5mA ~ 60mA by the external SENSE resistor, keeping the output current at the set value.

**RM9005D** has a simple system structure with very few peripherals. And the peripheral circuit works without magnetic components. It applies multichip in parallel, and these chips can share PCB board with LED. What makes it more convenient is that the LED current can be set outside.

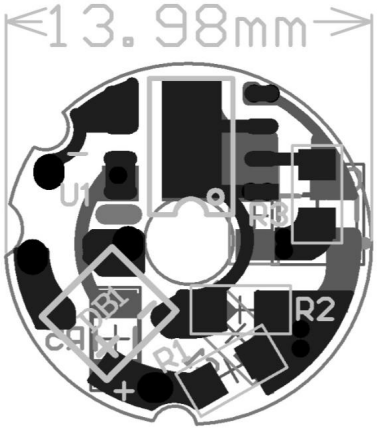
**RM9005D** has no EMI problem with its application line for that it is equipped with built-in HVMOS of 400v, and it has the temperature adjusting ability.

**RM9005D** is available in ESOP-8 package.

## System Specification：4W/24mA

| | |
|---|---|
| Input Voltage | 120Vac |
| Output Voltage | 130V |
| Output Current | 20mA |
| CC tol. | <±3% |
| Efficiency | >70% |
| PF | >0.9 |
| Topological Structure | high-voltage linear |

**PCB:**




## Typical Applications：

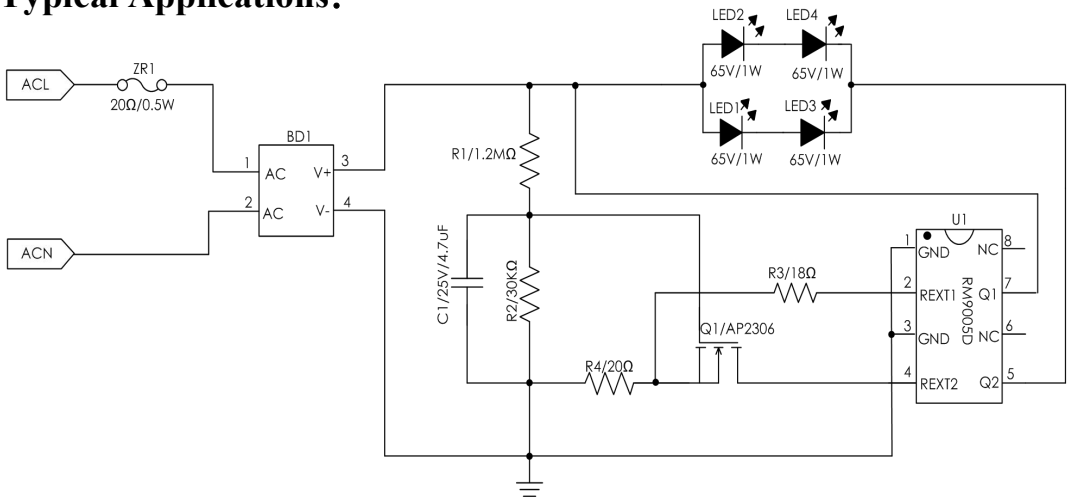



Figure 1 The schematic diagram of the system application

## BOM of the system：

| Item Number | Part Type | Specification | Package Dimensions | Quantity | Manufacturer |
|---|---|---|---|---|---|
| U1 | IC | RM9005D | ESOP-8 | 1 | Reactor |
| ZR1 | Anti-surge Resistor | 20R/0.5W | Plug-in | 1 | |
| BD1 | Bridge Rectifier | MB10F | SMD | 1 | |
| R1 | Chip Resistor | 1.2M/5% | 1206 | 1 | |
| R2 | Chip Resistor | 30K/5% | 1206 | 1 | |
| C1 | Chip Capacitor | 4.7uF/25V | 0805 | 1 | |
| R3 | Chip Resistor | 18R/1% | 1206 | 1 | |
| R4 | Chip Resistor | 20R/1% | 1206 | 1 | |
| Q1 | Chip MOS | AP2306 | Sot-23 | 1 | |
| R5 | Chip Resistor | 100R/5% | 1206 | 1 | |
| LED | Ligament | | 65V/1W | 4 | |
| Power Supply | 14mm*14mm glass fiber | | Thickness 1.0mm | 1 | |

Note: anti-surge resistance is directly connected to the AC input line. See the connection mode in the schematic diagram.