



الحمادي للإلكترونيات
ALHAMMADI FOR ELECTRONICS

Features:

- *6-40V wide voltage input
- * Synchronous rectification with high efficiency of 97%.
- *Constant voltage and constant current output is continuously adjustable
- * Two 85V 80A high current MOS tubes
- *3 0.8MM pure copper wires of 23M iron-silicon aluminum are used to wind together.

module parameters;

Module nature: synchronous rectification non-isolated step-down
constant current constant voltage module

Input voltage: 6-40VDC

Output voltage: continuously adjustable (1.2-35VDC) below 32V for a long time (suitable for applications where the input voltage is higher than the output voltage and cannot be boosted)

Output current: 20A max. Within 15A for a long time (please add a fan to dissipate heat when the temperature of the power tube exceeds 65 degrees, and please derate for high voltage output)

Current limiting range: 0.3.-20A (adjust) **If the module exceeds 65 degrees, please add a fan.**

Minimum dropout voltage: 3V

WORKING FREQUENCY: 150KHZ

Conversion efficiency: up to about 97% The efficiency is related to the differential pressure and the environment in which it is used

Output ripple: ripple about 50mV (without noise), 20M bandwidth (for reference only), input 24V measured

Operating temperature: -10°C to $+75^{\circ}\text{C}$ (please pay attention to the temperature of the power tube for actual use, please strengthen heat dissipation or derating if the temperature is too high)

Potentiometer Adjustment Direction: Clockwise (Increasing),
Counterclockwise (Decreasing)

Output short-circuit protection: with (instantaneous protection)
constant current (the current setting constant current value cannot be short-circuited for a long time)

Input Reverse Polarity Protection: None,

Output anti-backperfusion: None, an external diode is required for load self-charged or inductive loads!

Wiring method: terminal block

MODULE SIZE: 60*53*30MM

Scope of application: high-power LED constant current drive, lithium battery charging (including ferroelectric), 4V, 6V, 12V, 14V, 24V battery charging, nickel-cadmium nickel-metal hydride battery (battery pack) charging, solar panels, wind turbines

Output current regulation method:

1. Adjust the CV potentiometer and set the output voltage to the voltage you need according to your load requirements.

2. Set the CC potentiometer counterclockwise for about 30 turns, (that is, set the output current to the minimum), connect the LED, and adjust the CC potentiometer to the current you need. For battery charging, after the battery is discharged, then connect to the output, adjust the CC to the current you need, (when used for charging, you must use the discharged battery to adjust accurately, because the more power the battery has left, the smaller the charging current.))

