

11/05-01

Data sheet and connections

**HKO High-Power-Constant-Current-Source Type: HKO750**  
for 3 Watts **Cree XLamp3 7090**  
and other applications with **750-mA- High-Power-LEDs**



## HKO750 - HIGH-POWER-CONSTANT-CURRENT-SOURCE 750 mA

for 3 Watts Cree XLamp3 7090 and other applications with 750-mA- High-Power-LEDs

High efficiency and very little heat are achieved by modern switching-technology. The use of special amplifiers guarantees precise and constant output current. Very small dimensions, low weight and high reliability through SMT-technology (surface mounted components). Every HKO is electronically tested.

Technical data 750-mA-version:

- Startup ca. 5,8 Volt (for one 3 watts LED)
- Drop: ca. 2,5 Volts
- Maximum input voltage: 35 Volt DC
- Output: protected against short circuit
- Output current: 750 mA constant
- Input: reverse polarity protected
- Tolerance < 3%
- Efficiency: between 75% and 90% depending on the number of LEDs
- Thermal protection
- Working temperature range: -40°C to +85°C (degrees Centigrade)

The circuit can drive with constant current up to 10 High-Power Leds in white, blue or green, or up to 16 High-Power Leds in red , amber or orange, depending on input voltage.

The circuits backside consists of tin-plated copper to support better heat management. It is connected with -IN, please take care when mounting, you should use Cooltape-pads or similar for isolation. The constant current-source should be cooled. It is recommended to use Cooltape-pads and a SK452 heatsink, it is also possible, to mount it on a metal-surface etc..

### Printed circuit board:

New dimensions: 23 mm x 23 mm, 7 mm high

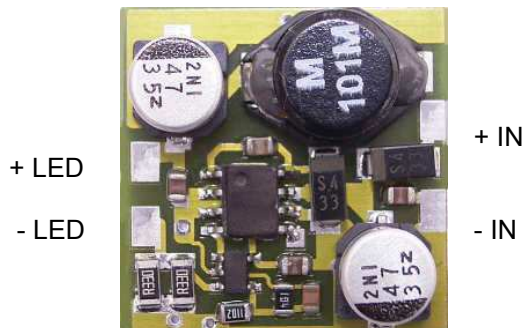
Connections: soldering pads

Weight: ca. 4 grams

Material: FR4, glass/epoxy

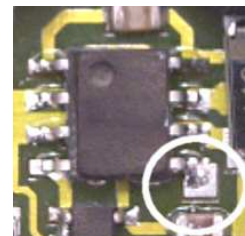
Backside: copper, tin-plated, connected with - IN

### Connections:



*Shutdown- Pin:* At the Shutdown- Pin is a soldering Pad that can be used for external controlling e.g. by using a fader or our "dimled" to control the brightness independent auf your main power supply.(TTL-compatible).

Shutdown-Pin:  
See mark.



Attention: NEVER connect „-IN“ and „-Led“!!!

Available versions:

HKO100 (100 mA), HKO150 (150 mA), HKO350 (350 mA), HKO385 (385 mA), HKO400 (400 mA), HKO500 (500 mA),  
HKO700 (700 mA), HKO750 (750 mA), HKO1000 (1000 mA), HKO1050 (1050 mA), HKO1400 (1400 mA).

-date: 12/05-alterations preserved-

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