

06/04-02

Data sheet and connections

HKO High-Power-Constant-Current-Source Type: HKO700
for **Luxeon V** (5 Watts), 3 Watts **Luxeon Stars**
and other applications with **700-mA- High-Power-LEDs**



HKO700 - HIGH-POWER-CONSTANT-CURRENT-SOURCE 700 mA

for safe operation of 5 watts Luxeon LEDs and other 700-mA-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 700-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: 700 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, or two pieces of 5 watt Luxeon V. 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

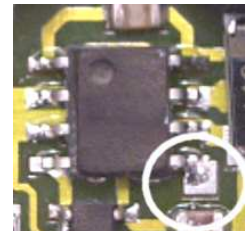
Backside: copper, tin-plated, connected with - IN

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“!!! Do not switch output side, switch input side only.

Available versions:

HKO100 (100mA), HKO150 (150mA), HKO350 (350mA), HKO385 (385mA), HKO400 (400mA), HKO500 (500mA), HKO700 (700mA), HKO750 (750mA), HKO1000 (1000mA), HKO1050 (1050mA), HKO1400 (1400 mA), HKO1500 (1500mA).

-date: 012/05-alterations preserved-

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