

09/04-01

Data sheet and connections



# HKO High-Power Constant-Current-Source Type: HKO1050 for paralleling of Luxeon Stars and other special purposes

## HKO1050 - HIGH-POWER-CONSTANT-CURRENT-SOURCE 1050 mA for paralleling of Luxeon Stars , e.g. in 3 chains of 3x 350 mA LEDs each and other special purposes

High efficiency and very low heat is 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 1050mA-version:

- Startup: ca. 6,8 Volt
- Drop: ca. 3,5 Volt
- Maximum input: 35 Volt DC
- Output: protected against short circuit
- Output: 1050 mA
- Input: reverse polarity protected
- Tolerance < 3%
- Temperature range: -40 °C to+85 °C

This constant current-source can drive three chains of each at least three Luxeon stars of 350 mA in series, when connecting the three chains in parallel (at 24Vin). You must take care, that all chains draw the same current, about 350 mA each! 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

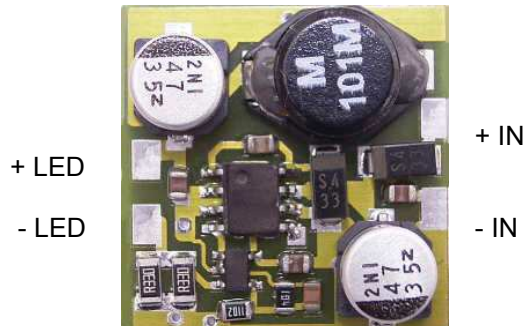
Connections: soldering pads

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 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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