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Datasheet and connections

HKO High-Power Constant-Current Source for Luxeon Stars and other High-Power-LEDs

Versions: HKO150 HKO350, HKO385, HKO400, HKO500, HKO700, HKO1000, HKO1050

Page 1: real current consumption



HKO High-Power Constant-Current Source

- High efficiency and very little 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.



Real Current/Power Consumption

See power saving effects at the table below.

Measured with one Luxeon Star of the named type.

In the last row see data of a circuit with pre-resistor for comparison.

Voltage V	mA/Watts for HKO700 with 1 3W Luxeon	mA/Watts for HKO1000 with 1 3W Luxeon	mA/Watts for HKO350 with 1 1W Luxeon	mA/Watts for pre-resistor with 1 1W Luxeon
5	not recommended	not recommended	295 mA 1,48 W	350 mA 1,75W
6	530 mA 2,1 W	(750) mA 4,5 W	245 mA 1,47 W	350 mA 2,1 W
7,2	420 mA 3,02 W	650 mA 4,68 W	200 mA 1,44 W	350 mA 2,52 W
8	390 mA 3,12 W	580 mA 4,64 W	180 mA 1,44 W	350 mA 2,8 W
9	345 mA 3,11 W	510 mA 4,59 W	160 mA 1,44 W	350 mA 3,15 W
10	310 mA 3,1 W	460 mA 4,6 W	145 mA 1,45 W	350 mA 3,5 W
12	260 mA 3,12 W	380 mA 4,56 W	120 mA 1,44 W	350 mA 4,2 W
13,8	240 mA 3,31 W	330 mA 4,55 W	105 mA 1,45 W	350 mA 4,83 W
15	210 mA 3,15 W	310 mA 4,65 W	100 mA 1,5 W	350 mA 5,25 W
24	120 mA 2,88 W	200 mA 4,8 W	60 mA 1,44 W	350 mA 8,4 W

As one can see the power losses get very significant when using linear current regulation!

Available Versions:

HKO150 (150 mA), HKO350 (350 mA), HKO385 (385 mA), HKO400 (400 mA), HKO500 (500 mA), HKO700 (700 mA),
HKO1000 (1000 mA), HKO1050 (1050 mA).

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