

LED-TECH.DE
OPTOELECTRONICS



LED-TECH.DE COB Slim Modules

PowerLine SLIM Constant Current Power Supply for COB (180mA, 30V)



Part Number: LT-1444

Housing Color: alu-silver

mA typ.: 180 mA

V max.: 30 V

180mA version especially for COB slim modules!

New Low-Drop SLIM Version on alu PCB!

The linear PowerLine constant current power supplies are characterized by higher operating ranges and actually PWM capability (Pulse-Width Modulation). If you do not know exactly what the sense of those power supplies is please read the following lines:

Even high power LED application can only guaranty 100% of the LEDs lifetime if the illuminants get a constant current supply. You have the possibility to use a constant current power supply with a step-down converter (product example) that come in a very small housing but is not able to be used in a RGB application.

The other possibility is to use a linear constant current power supply in PCB version. We placed all components on a high quality aluminium PCB which can be integrated directly in other applications or can be mounted directly on metal surfaces to guaranty a good heat conductance in during use.

Alternative: The PowerLine constant current power supplies are available with cooling elements, too.

Connecting and quality are on highest levels. Connecting is very easy too because the 4 big soldering pads are clearly defined by inscriptions. Please read below the further features of this powerful little helper.

Technical data:

- Drop voltage: 1V
- Input: 30V DC (max.)
- Output: 180mA constant
- PCB electrical isolated!
- Input short circuit protection
- Output short circuit protection
- Autom. current reduction if too much heat!
- Operating Temp: -50°C over ambient temp.
- Max. input voltage: 10V over LED voltage
- 2 mounting eyes
- Dimensions (W/H/D): 50 x 7 x 15 mm

Example 1:

You are going to connect three white Luxeon LEDs with 3,42 forward voltage each (mostly mentioned as V_f in common datasheets). The input voltage can change from 11,26V ($3,42 + 3,42 + 3,42 + 1,0$) till 21,26V ($11,26 + 10,0$). A 12V power supply could be used with this application.



Example 2:

You are going to connect one red Luxeon LED (2,85V). The input voltage can change from 3,85V (2,85 + 1,0) till 13,85V (3,85 + 10,0). In that case a 12V power supply would be better than a 24V version.

If you have any questions please send us an email.

Chip On Board SLIM Module (white)



Part Number: LT-1446

Viewing Angle: 120°

Emitting Color: white

MCD typ.: 29700 mcd

Lumen typ.: 140 mcd

Kelvin typ.: 6000

mA typ.: 180 mA

V typ.: 9.6 V

COB Slim modules - There is nothing smaller!

The main advantage of the ultraslim COB modules are the very small dimensions and the FR4 material. The connection pads have intentionally been placed on the back side. This avoids soldering of connection cables onto the front side which would make the modules higher than 0.3mm of course. The whole concept of the COB modules is based on minimum space requirement and highest possible light output. This makes them perfect for

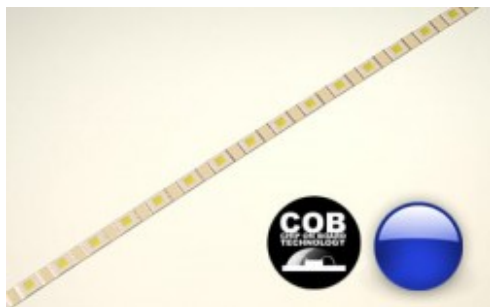
- Accent lighting
- Modelbuilding
- Automotive indoor lighting

and many other points of use. The modules shall be run with 180mA constant current. This is why we launched a special 180mA version of the well-known PowerLine Slim drivers. Those give you the possibility to run the stripes up to 30V/DC which means that you can also drive a few in series connection behind each other.

The module has 9x3=27 chips in the above-mentioned emitting color.



Chip On Board SLIM Module (blue)



Part Number: LT-1447

Viewing Angle: 120°

Emitting Color: blue

MCD typ.: 4050 mcd

mA typ.: 180 mA

V typ.: 9.6 V

COB Slim modules - There is nothing smaller!

The main advantage of the ultraslim COB modules are the very small dimensions and the FR4 material. The connection pads have intentionally been placed on the back side. This avoids soldering of connection cables onto the front side which would make the modules higher than 0.3mm of course. The whole concept of the COB modules bases on minimum space requirement and highest possible light output. This makes them perfect for

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and many other point of use. The modules shall be run with 180mA constant current. This is why we launched a special 180mA version of the well known PowerLine Slim drivers. Those give you the possibility to run the stripes up to 30V/DC which means that you can also drive a few in series connection behind each other.

The module have $9 \times 3 = 27$ chips in the above mentioned emitting color.



BUCK Constant Current Power Supply for COB (180mA, 30V)



Part Number: LT-1534

Housing Color: black

mA typ.: 180 mA

V max.: 30 V

180mA version especially for 2.5W and COB slim modules!

The BUCK constant current power supplies also known as step down converters are characterized by high operating ranges that are not subject to the number of connected illuminants (LEDs). Example: You can run a BUCK driver with 30V but with only one LEDs on the output side. The BUCK adjusts the voltage very efficient and avoid overheating by autom. shut down to save the components. This is why we are able to offer this product for low prices because we can use FR4 PCB material instead of aluminium.

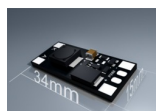
A further main advantage is the PWM capability (Pulse-Width Modulation). The BUCK is compatible to controllers using common anode and has to be connected parallel to the RGB controller. The +/- outputs of the controller provide the PWM signal for separate inputs on the BUCK PCB. This is a very easy way to run even big applications most efficiently and cost saving. The above linked diagram shows the connection in detail.

Conversion and quality are on highest levels. The very slim product style of only 15mm makes it perfect to fit in most LED profiles/tubes, torch housing and many more. Connecting is very easy too because the 4 big soldering pads are clearly defined by inscriptions. Please read below the further features of this powerful little helper.

Technical data:

- Input: 7-30V DC (max.)
- Output: 180mA constant
- PCB isolated by protective laquer
- Can be glued to other surfaces
- Input short circuit protection
- Output short circuit protection
- Autom. shut down to avoid overheating
- Operating Temp: -50°C over ambient temp.

If you have any questions please contact our support.



Imprint



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