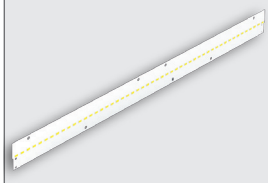
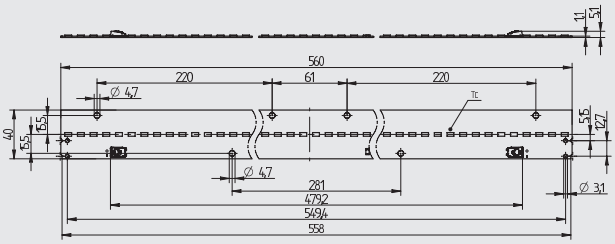
Linear LED Module 560 mm x 40 mm





pkg.	wt.	part no.
20	59 g	**31.130.**0008.00

Linear LED Module 560 mm x 40 mm

Range of applications:
Linear- and panel lights for office, commercial and industrial applications

- Suitable for parallel connection or connection in series
- Easy and secure assembly by P2F- Push-to-Fix - fixing elements or screws
- Easy linking / connecting of modules via two SMD terminal blocks
- Optimised for manual- and ADS-wiring

- Module efficiency up to 155 Lumen/Watt (A++) at Tc = 25 °C
- Tight colour tolerance: McAdams 3.5 SDCM
- Beam angle: 120°
- Life span L70 > 50.000 h*
- Ambient temperature: -30 °C up to +45 °C
- TC: max. 70 °C
- Risk group: 0
- Warranty*: 5 Years
- CE RoHS

Specific technical data (typical)

	Min.	Typical	Max.
Colour temperature		4.000 K	
Luminous flux at Tc 50 °C	3.600 lm	4.000 lm	4.400 lm
Module efficincy at Tc 50 °C	118 lm/W	131 lm/W	145 lm/W
Operational current I_f (mA)		700 mA	
Operational voltage U_f (V)	39.1 V	43.4 V	47.6 V
Power consumption (W)		30.3 W	
Energy-Efficiency		A+	
Colour Rendering Index CRI	80		

New

* Warranty conditions of BJB GmbH & Co KG as stated on page 100 of the LED Applications catalogue (Issue No.1 - 2014) and as available via the Internet under www.bjb.com/warranty-conditions.html are valid.

Applicable with:

P2F - Push-to-Fix
28.901.Uxxx

see page 62 of the LED Application catalogue

B2B - Board-to-Board Connecting elements
47.351 / 47.352

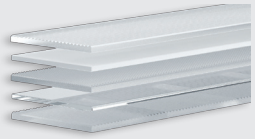
see page 66 of the LED Application catalogue

Optical holder

31.930.-3xxx

see page 26 of the LED Application catalogue

Optical profiles and plates
31.930.-4xxx



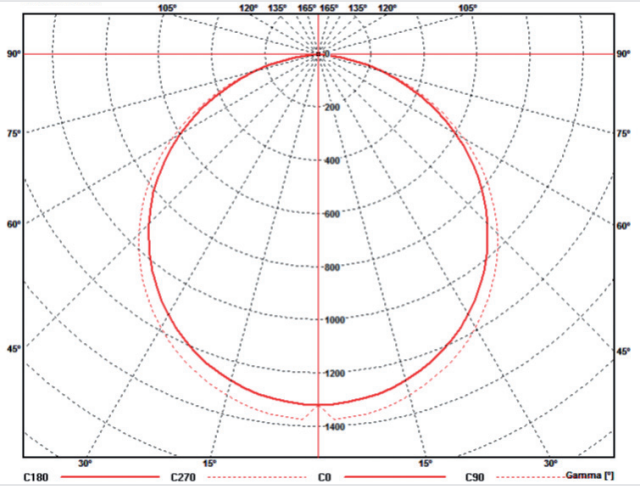
see page 27 of the LED Application catalogue

B2C - Board-to-Cable **47.312**
Feeder for PCBs - alternative for SMD terminal blocks.
Please contact us.

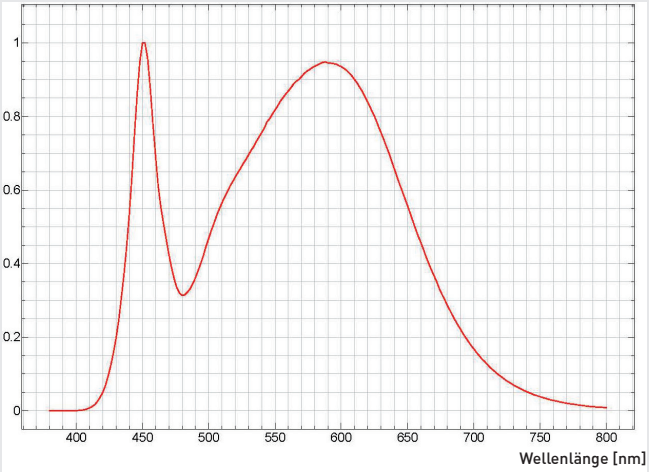
see page 72 of the LED Application catalogue

Linear LED Module 560 mm x 40 mm

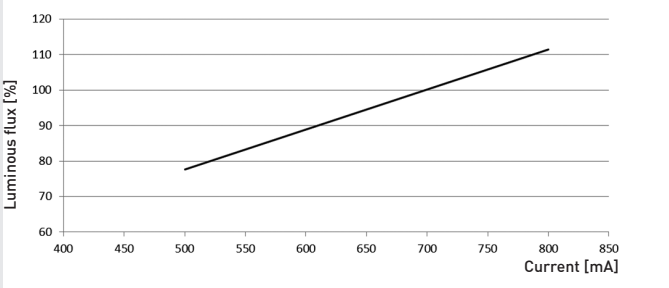
Light distribution



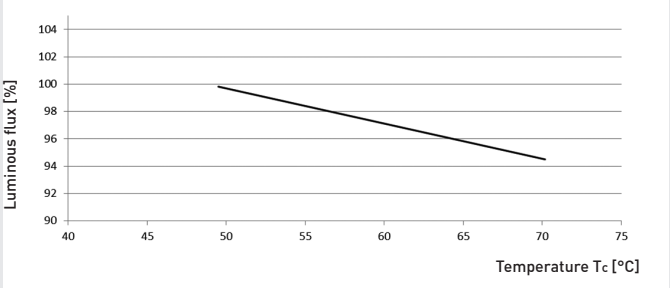
Spectral intensity



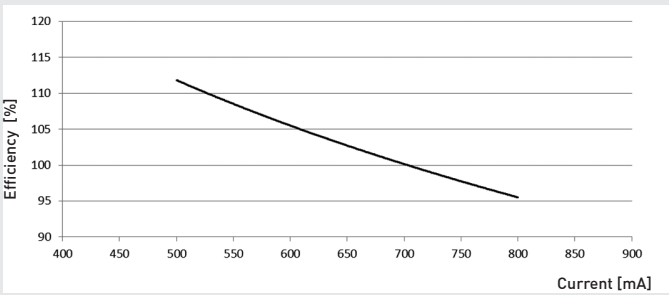
Relative luminous flux based on operational current



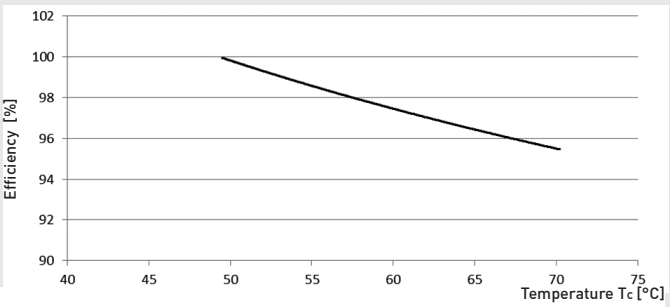
Relative luminous flux based on Tc



Efficiency / leading power



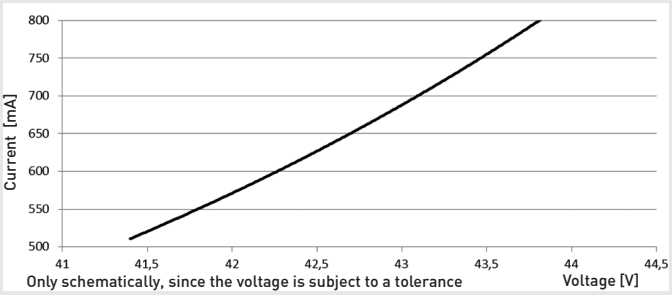
Efficiency / temperature



LED - Lighting and connection technology

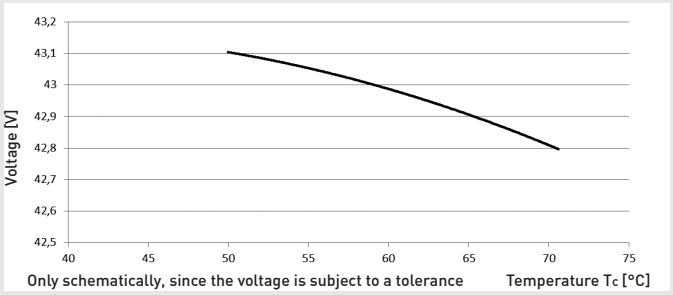
Linear LED Module 560 mm x 40 mm

Electrical current / voltage characteristics



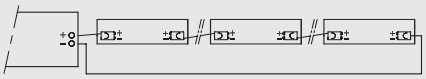
Only schematically, since the voltage is subject to a tolerance

Voltage / temperature

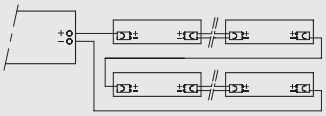


Only schematically, since the voltage is subject to a tolerance

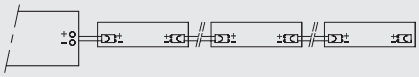
Series connection



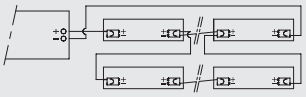
Series board in a parallel connection



Parallel connection



Parallel board in a series connection



The control gear shall be so designed that the maximum current of 700 mA is not exceeded.

LED - Lighting and connection technology

General information for Linear LED Module 560 mm x 40 mm

EOS/ESD safety guidelines
Some components of the BJB /// OEM – Line Modular System might be harmed by electrostatic discharge (ESD) and electrical overstress (EOS) and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken.
Modules with enclosed housing, where no contact to the LED module is possible do not need special measures for protection of electostatic discharge (ESD).

Assembly instructions
The LED module may be exposed to tensile or compressive stresses.
We recommend the use our P2F-Fixing element (**28.901**.Uxxx):
- Quick assembly process improves production efficiency and reduces production costs
- Eliminates potential damage from screw fixing due to low insertion force
- CrNi and silicone materials ensure long life reliability
- Reliable heat dissipation due to a constant pressure
- Suitable for Zhaga standardised hole sizes of ø 4.7 mm in LED board to ensure future proofed designs
- Assembly without any additional tools
- Solutions for Automation upon request
- Removable connection

Screw fixing
The LED Modules are fixed with at least five screws. For optimised thermal connection we recommend the use of all screw fixing holes. To protect the LED modules against damages only dome headed screws and locking washer should be used. Max. torque for screw fixing: 0,5 Nm

Note to chemical reactions
Chemical substances may harm the LED module. This could lead to reduced luminous flux, colour shift or total failure of the module caused by corrosion of electrical connections. Avoid corrosive atmosphere during usage and storage.

Life span and lumen maintenance
The light output of an LED module decreases over the life-time, this is characterized with the L value.
L70 means that the LED module will give 70 % of its initial luminous flux. This value is always related to the number of operation hours and therefore defines the lifetime of an LED module. As the L value is a statistical value and the lumen maintenace may vary over the delivered LED modules.

Thermal design, tc point, ambient temperature and life-time
The rated life of a LED module depends to a large extent on the temperature. If the permissible temperature limits are exceeded, the life of the LED module will be greatly reduced or the module may be destroyed.

The temperature at tc reference point is crucial for the light output and life-time of a LED module.

Electrical supply
- LED modules from BJB are not protected against overvoltages, overcurrents, overloads or short-circuit currents.
- Safe and reliable operation can only beguaranteed in conjunction with a LED control gear which complies with the relevant standards.
- BJB LED Module must be supplied by a constant current LED control gear.
- Operation with a constant voltage LED control gear will lead to an irreversible damage of the module.
- Wrong polarity can damage the LED module.
- If LED modules are wired in parallel connection and a wire breaks or a complete module fails then the current passing through the other module increases. This may reduce its life considerably. In addition there can be slight differences in light output caused by tolerances.

Wiring and cross section
The BJB LED module are equipped with a BJB SMD terminal blocks. The wiring can be solid cable with a cross section of 0,34 up to 0,75 mm². For perfect function of our SMD terminal blocks you have to strip the insulation 8,0+1 mm.

No tools required! Wires can be released by twisting and pulling the wire simultaneously.