



Now available for CREE
and NICHIA LEDs

More extensive than ever before:
Connecting element for LED STARboards

LED



Your Connection to Light



Light for life.

Connecting element for LED STARboards

Prerequisites...

- Compatible with LED Starboards, e.g. made by CREE, Edison, NICHIA, OSRAM, Philips, Lumileds and Seoul Semiconductor
- Solder less contact making, no life-span reducing thermal stress
- Easy interchangeability of components
- Easy adaption of optical systems (clip fixing instead of glue fixing)
- Exact positioning of the Lamp on LED
- Compatible with light control systems, e.g. Carclo optics or Jordan reflectors



Way ahead clear for LED. With the new connectors for STARboard.

LEDs increasingly present the lighting and domestic appliance industry with new challenges. Key considerations here are the selection of suitable light sources and their positioning and fixing within the light fitting. Other barriers to the use of LEDs are the questions of contacting and heat management. The possibility of replacement in case of failure is still largely unresolved, as is the simple use of suitable optics for light direction and bundling.

Some high-intensity LEDs offered today come with an emitter mounted on a "STARboard". The "STARboard" is fixed by screws. However, contact is by means of conductors which are soldered on, so that, in case of repair, the LED can only be replaced by a specialist!

**No soldering of wires!
No adhesives for optical systems!
With connection guarantee!**

Many light fitting manufacturers are demanding a connector which will eliminate these difficulties. BJB has therefore developed a system for LED STARboards which greatly simplifies the use of LEDs in light fittings.

With our attachment and connectors, LED STARboards from many manufacturers can be connected and fitted with optical systems without the need for soldering or gluing.



The connectors (version depends on the planned LED) and the STARboard are both fixed with two screws. Electrical contact is by means of two push-wire terminals. The optic holder is clipped onto the connector, and the optical system itself clips into this. The complete assembly process takes place without any soldering or gluing.

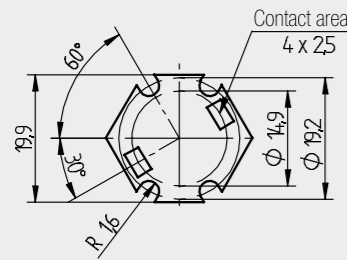
Sources:



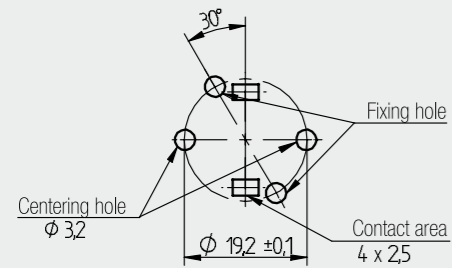
LED - Lighting and connection technology
Connectors for STARboards with LED



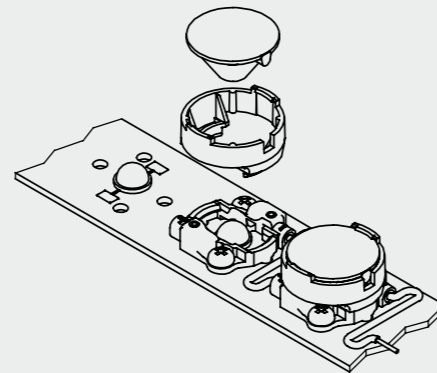
Dimensions of star PCB



Cut-out for use with PCB's



Example of application with PCB's



Identification of connecting pieces

To make identification easier, each part will be marked with a 2 digit code.



Test ports

For efficient final testing after assembly of the LED, connecting pieces are equipped with two test ports for top testing with an adaptor.



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Cree XLamp XP-E/C	Cree XLamp XE-E/C	Edison EdiPower	NICHIA NCSW119J
47.313.5101.80	47.313.5201.80	47.313.1000.80	47.313.3101.80
47.313.-320..	47.313.-320..	Due to a wide area of illumination an application of lenses with ø 20 mm is not possible.	47.313.-320..
Carclo Optics ø 20 mm Plain Tight, 8.2° No. 10193	Carclo Optics ø 20 mm Plain Tight, 8.4° No. 10199		Carclo Optics ø 20 mm Plain Tight, 8.2° No. 10193
ø 20 mm Frosted Tight, 10.4° No. 10194	ø 20 mm Frosted Tight, 10° No. 10200		ø 20 mm Frosted Tight, 10.4° No. 10194
ø 20 mm Frosted Medium, 17.9° No. 10195	ø 20 mm Frosted Medium, 20° No. 10201		ø 20 mm Frosted Medium, 20° No. 10195
ø 20 mm Frosted Wide, 36° No. 10196	ø 20 mm Frosted Wide, 36° No. 10202		ø 20 mm Frosted Wide, 31.5° No. 10196
ø 20 mm Elliptical, 41 x 10° No. 10197	ø 20 mm Elliptical, 41 x 10° No. 10203		ø 20 mm Elliptical, 41 x 10° No. 10197

OSRAM DRAGON-X120°	Seoul Semiconductor Z-Power P4	Philips Lumileds LUXEON® Rebel *	Philips Lumileds LUXEON® Rebel
47.313.1101.80	47.313.5001.80	47.313.2401.80	47.313.2401.80
47.313.-320..	47.313.-320..	47.313.-320..	47.313.-320..
Carclo Optics ø 20 mm Plain Tight, 5.4° No. 10193	Carclo Optics ø 20 mm Plain Tight, 9.5° No. 10003	Carclo Optics ø 20 mm Plain Tight, 8.7° No. 10193	Jordan Reflectors Reflector Rebel Spot Mirror finished surface 8° No. 112752010105
ø 20 mm Frosted Narrow, 10° No. 10194	ø 20 mm Frosted Narrow, 15.4° No. 10138	ø 20 mm Frosted Narrow, 12° No. 10194	Jordan Reflectors Reflector Rebel Medium Sand blasted surface 20° No. 112755010105
ø 20 mm Frosted Medium, 19° No. 10195	ø 20 mm Frosted Medium, 23.8° No. 10139	ø 20 mm Frosted Medium, 19° No. 10195	
ø 20 mm Frosted Wide, 32° No. 10196	ø 20 mm Frosted Wide, 31.8° No. 10140R2	ø 20 mm Frosted Wide, 35° No. 10196	
ø 20 mm Elliptical, 39 x 7.8° No. 10197	ø 20 mm Elliptical, 44 x 15° No. 10003/L25	ø 20 mm Elliptical, 45 x 9.5° No. 10197	

* alternatively star PCB of Drees Lichttechnik (www.drees-lichttechnik.eu)

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Connectors for STARboards with LED

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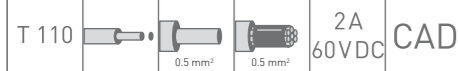
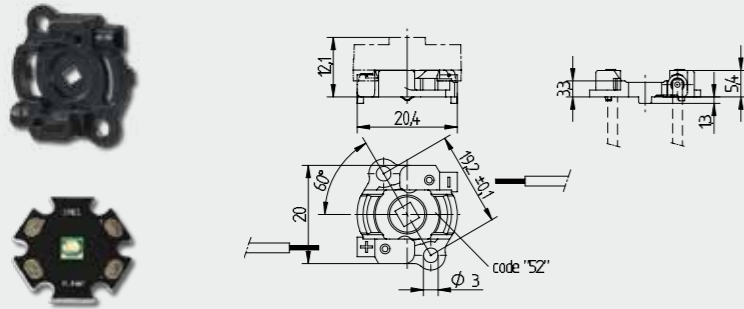
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250 1 g 47.313.5101.80

With centring
For LED XLamp XP-E/C from Cree

Screw fixing

Housing: PBT
Contacts: CuSn

- For use with holder for optical systems 47.313.-3xx
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and locking washer
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6^{±1} mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



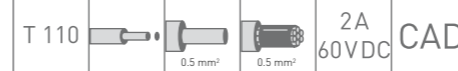
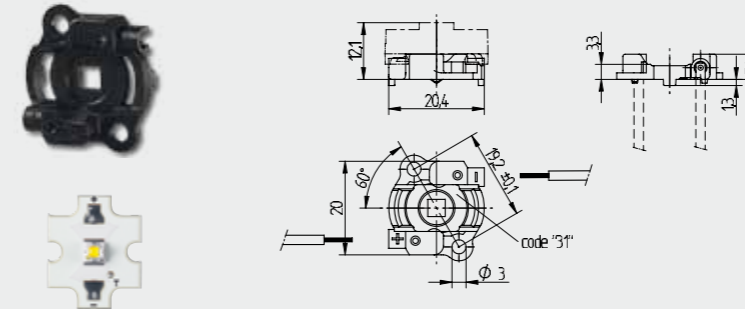
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250 1 g 47.313.3101.80

With centring
For LED NCSW1119J from NICHIA

Screw fixing

Housing: PBT
Contacts: CuSn

- For use with holder for optical systems 47.313.-3xx
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and retaining rings
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6^{±1} mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



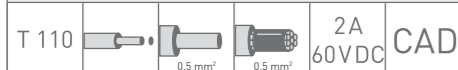
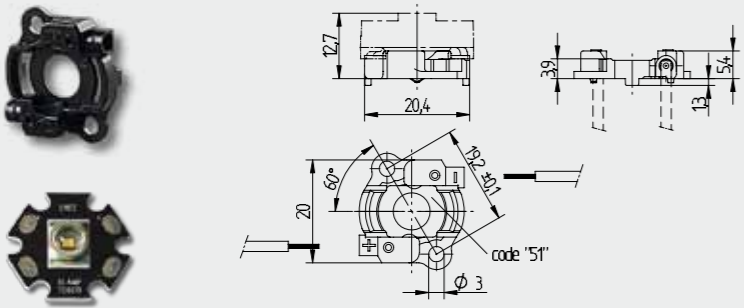
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With centring
For LED XLamp XR-E/C from Cree

Screw fixing

Housing: PBT
Contacts: CuSn

- For use with holder for optical systems 47.313.-3xx
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and retaining rings
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6^{±1} mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



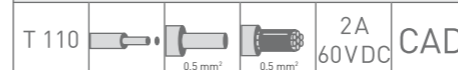
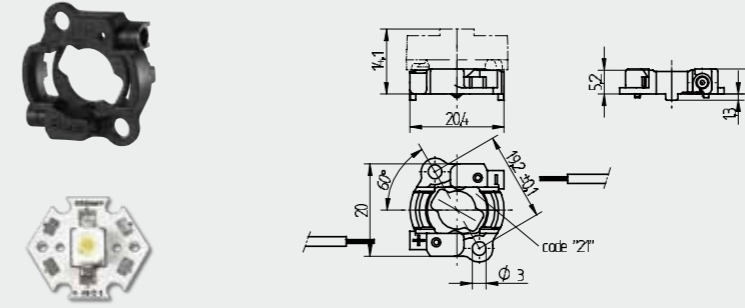
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250 1 g 47.313.2301.80

With centring
For LED DRAGON-X 120° from OSRAM

Screw fixing

Housing: PBT
Contacts: CuSn

- For use with holder for optical systems 47.313.-3xx
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and retaining rings
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6^{±1} mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



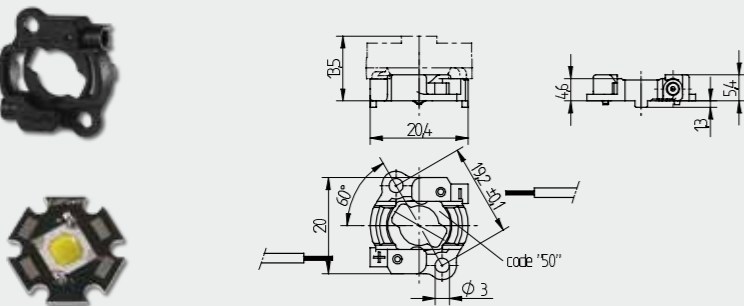
pkg. wt. part-no.
250 1 g 47.313.5001.80

With centring
For LED EdiPower from Edision

Screw fixing

Housing: PBT
Contacts: CuSn

- Not for use with optical systems
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and retaining rings
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6^{±1} mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



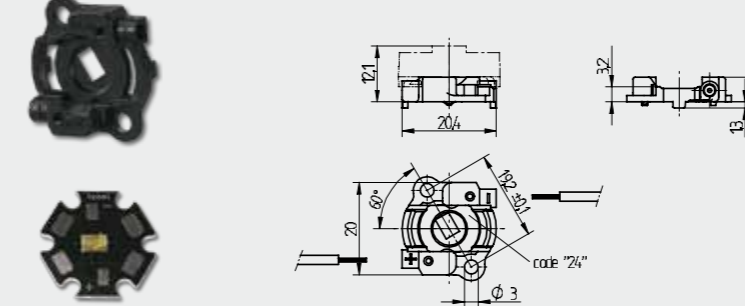
pkg. wt. part-no.
250 1 g 47.313.2401.80

With centring
For LED LUXEON® Rebel from Philips Lumileds

Screw fixing

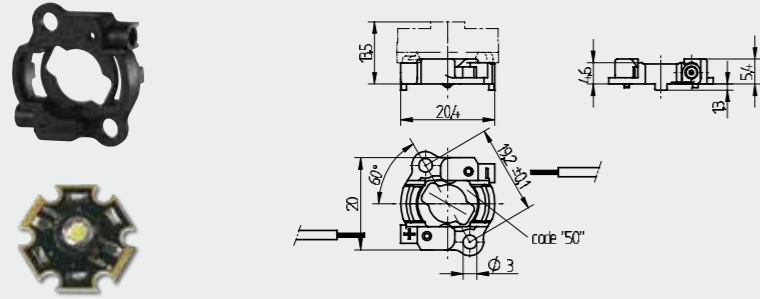
Housing: PBT
Contacts: CuSn

- For use with holder for optical systems 47.313.-3xx
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and retaining rings
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6^{±1} mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



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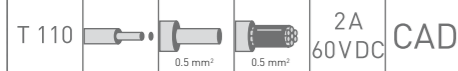
pkg.	wt.	part-no.
250	1 g	47.313.5001.80

With centring
For LED Z-Power P4 from Seoul Semiconductor

Screw fixing

Housing: PBT
Contacts: CuSn

- For use with holder for optical systems 47.313.-3xx
- Screw fixing: for screws M3 or self-tapping screws with \varnothing 3 mm and retaining rings
- Max. torque for screw fixing 0.6 Nm
- Strip length: 6⁺¹ mm
- Test ports
- Polarity of LED must be observed
- Specifications of LED-manufacturer must be observed



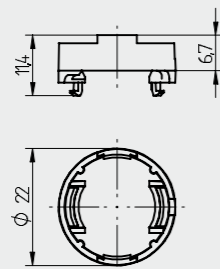
colour	pkg.	wt.	part-no.
white	250	1 g	47.313.-320.50
black	250	1 g	47.313.-320.80

Holder for optical systems with \varnothing 20 mm

Snap in fixing for connecting pieces and lenses

Material: PC

- For use with connecting piece 47.313..
- Specifications from Carclo Optics and Jordan Reflector must be observed
- Possible combinations with STARboard and lenses



CAD

Symbols

T 110 Temperature rating	Single push wire terminals	For solid conductors within the cross sectional range stated
For tinned wire ends within the cross sectional range stated	2A 60VDC Rating	CAD CAD data available



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