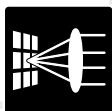


LED

A50

cd / klm



SMD Push-to-Fix (P2F)

Reflowable fixing element for LED boards



BJB///OEM-Line

The smartest route to your LED application



Technology for Light

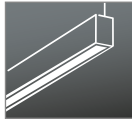
Components · Optics · Automation



Waterproof
luminaire with
cover



Batten
luminaire



Pendant
luminaire



Striplight
module



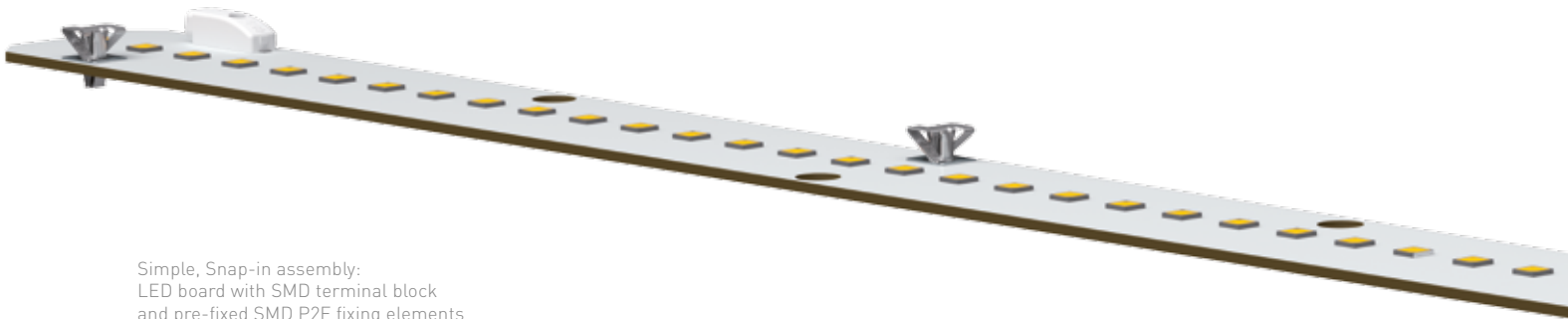
Floor standing/
table lamps



SMD P2F – Fixing element for LED boards. It's a snap!"

New from BJB: For a particularly quick and easy installation of LED boards in luminaire housings, we have developed the reflowable SMD P2F fixing element. It is suitable for LED boards in linear and panel type luminaires.

The special feature here is the pre-fixing of the P2F, which is soldered onto the surface by means of a solder plate during the SMD assembly process. During final installation, the PCB is then securely fixed by simply clicking it into the housing. This can be performed either manually or automatically.



Simple, Snap-in assembly:
LED board with SMD terminal block
and pre-fixed SMD P2F fixing elements

Components

SMD P2F solderable	28.904.U101
Packaging unit	700 pieces
Manual setting tool	1 piece
Prepared as tape-and-reel	

Function

- 1 Integrated pre-centring: Fixing holes easy to locate by means of protruding P2F.



- 2 The PCB is placed on the luminaire housing in such a way that the fixing elements connect into the holes provided



- 3 The spring clip is pressed into its final position either automatically or by means of a manual setting tool. In this way, the PCB is permanently connected to the luminaire mounting plate with a defined contact pressure.



A solution which makes using LEDs even easier

We supply SMD P2F fixing elements for LED boards ready made-up in tape-and-reel form. For automatic SMD assembly, an appropriate footprint has to be provided on the PCB as well as a cut-out of Ø 4.5 mm.

For fixing each LED board, a cut-out of Ø 3.0 mm is required in the mounting plate.



Spring clip

Solder plate



Tape-and-Reel

Demands and challenges

- time-consuming production process with screws
- increased supply costs
- no defined contact pressure with self-tapping screws

- Screws do not guarantee a long-term defined contact pressure

- Screw heads can cause shadowing

Advantages

- simplified final installation by means of pre-fixed components
- reduction in number of work stages in final installation
- variable package thickness of 1.5 to 2.6 mm

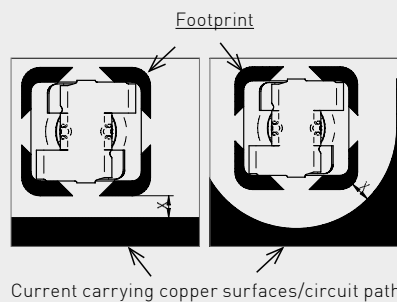
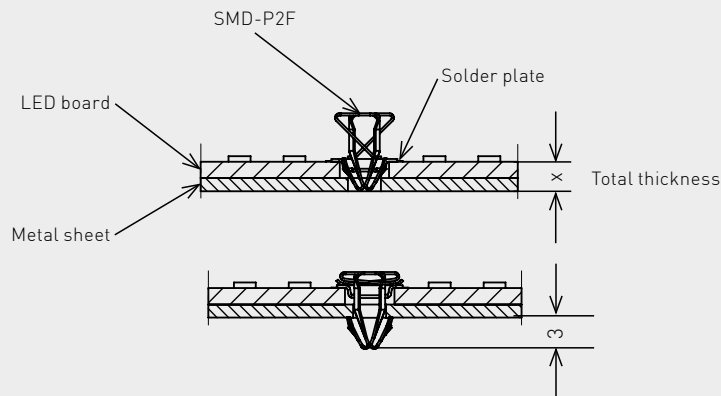
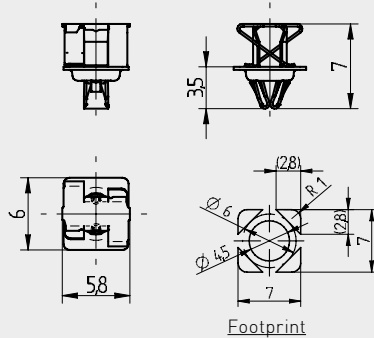
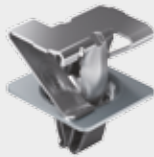
- high-strength, elastic spring clips
- guarantee a permanent contact pressure

- lowest possible protrusion above the PCB prevents shadowing

- flush-fit snap connection
- only one component for fixing
- shock and vibration resistant



SMD-P2F (Push-to-Fix) – fixing element for LED circuit boards



pkg. wt. part no.
700 0.18 g 28.904.U101.10

SMD-P2F (Push-to-Fix) – fixing element
For simplified final installation of LED boards by means of pre-attached P2F

Push fixing for LED boards
Material: Spring: CrNi
Solder plate: CuSn
Total thickness (x): 1,5 - 2,6 mm

- No additional screw-fitting procedure required
- Permanent, constant contact pressure with a minimum pressure force of 5 N
- Suitable for standardised hole patterns with $\varnothing 4.5$ mm in the LED board
- For mounting plate cut-out $\varnothing 3.0 \pm 0.2$ mm
- Reliable heat dissipation due to constant contact pressure
- Suitable for manual and automatic final installation of PCBs
- Automated solution on request
- Very flat component to avoid shadowing
- Alternative to screw fixing => no torque screwdriver required
- Quick installation process increases productivity and reduces production costs
- Tape-and-reel packaging
- Low insertion force prevents possible damage which may occur with screw fixing
- Releasable connection

Creepage and clearance distances

The SMD-P2F fixing element has direct contact with the metal work of the luminaire via the metallic spring clip.

The distance "X" is therefore dependent on the applicable standard, the luminaire class (luminaire application) and the required creepage and clearance distances for this purpose and must be observed accordingly.



Example of assembly with P2F bit and bit holder

The spring clip is pressed down with an assembly tool consisting of bit holder and mounting bit. The assembly bit limits the path when the spring clip is pressed down. In this way, the spring clip is not overstretched and the pressure force of the LED board on the gear tray is ensured.

All in all 3 different mounting bits are available for 3 different package thickness ranges.

Bit



28.901.U811.10
Package thickness:
2.4 - 2.6 mm

28.901.U812.10
Package thickness:
1.8 - 2.3 mm

28.901.U813.10
Package thickness:
1.5 - 1.7 mm

Bit holder

28.901.U801.89





SMD-P2F - Ideal for the automated production of LED luminaires

Maximum production efficiency is achieved when LED boards are installed automatically. This is where the SMD-P2F demonstrates its greatest value. Our BJB Automation division designs systems to suit your requirements. This

enables you to achieve maximum levels of quality and efficiency to simplify complex assembly processes.



An overview of the most important features

Automated production with the SMD-P2F

- ESD-protected system for LED processing
- Compact design, easy to operate
- Simplified assembly process
- Perfectly designed for use with components from the BJB///OEM-Line
- Easy changeover to new processes and fixture designs
- Can be combined with other automation technology
- Faster and more efficient production
- Greater accuracy and production quality



ABOUT BJB

BJB was founded in 1867 by Friedrich Wilhelm Brökelmann, Franz Jäger and Gustav Busse. The business began as a factory for petroleum lamps and developed into a company which manufactured components for establishing the connection between power supply and light. Today, BJB is a lighting technology brand which supplies innovative solutions to the lighting and domestic appliance industries worldwide.

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