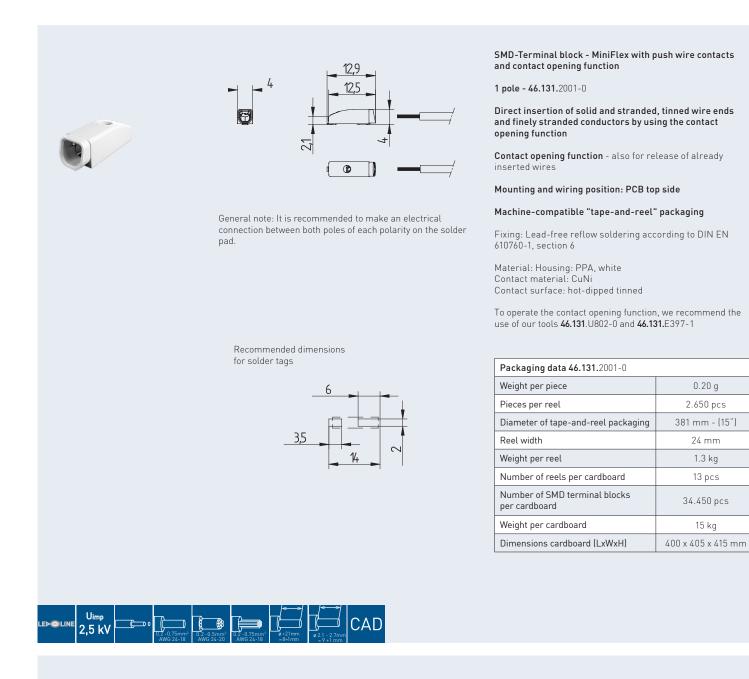
46.131 · SMD Terminal block - MiniFlex

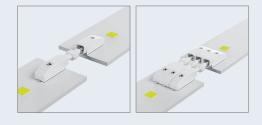




Accessories:

SMD Mini-Flex-B2B-connector. For connecting PCBs. Connectors are available in 26 mm (U701), 28 mm (U702) and 30 mm (U703) length.





Contact opening tool

For opening the contacts when using fine-stranded conductors or to remove already inserted conductors.



46.131.U802-0



46.131.E397-1

Integrated stripping function for wire ends cut but not stripped

SMD Terminal blocks

46.131 · SMD-Terminal block - MiniFlex · General technical information



| Connection data | | |
|--|----------------------------|--|
| Connection technology | Push wire contacts | |
| Solid wires | 0.20 - 0.75 mm², AWG 24-18 | |
| Stranded, tinned wires | 0.20 - 0.5 mm², AWG 24-20 | |
| Stranded wires | 0.20 - 0.75 mm², AWG 24-18 | |
| Strip length (ø < 2.1 mm) | 8 +1 mm | |
| Strip length (ø 2.1 - 2.7 mm) | 9 +1 mm | |
| Conductor entry angle to the PCB | 0° | |
| Wire release function by | Contact opening tool | |
| | - | |
| Pull-out force according to DN 60999-1 | | |
| 0.2 mm ² | min. 10 N | |
| 0.34 mm ² | min. 15 N | |
| 0.5 mm ² | min. 20 N | |
| 0.75 mm ² | min. 30 N | |
| nsertion force | max. 10 N | |
| Geometrical data | | |
| Pin spacing | 4 mm / 0.16 inch | |
| Nidth | 4 mm / 0.16 inch | |
| Height | 4 mm / 0.16 inch | |
| Depth | 12.9 mm / 0.51 inch | |
| | | |
| Material data | | |
| Insulating material group | 1 | |
| nsulating material | PPA, white | |
| PTI | 600 | |
| Flammability class, based on UL 94 | V-0 | |
| Contact material | CuNi | |
| Contact surface | hot-dipped tinned | |
| Mechanical data | | |
| Mounting position | PCB top side | |
| Mounting type | Lead-free reflow soldering | |
| | | |
| Temperature data | | |
| Marginal temperatures | -40 °C to + 150 °C | |
| Ambient temperature | -40 °C to + 125 °C | |
| T-classification according to IEC 60998-1 para. 12 | 120° C | |

Rated data according to IEC / EN 60947-7-4 (IEC/EN 60664-1)

| Rated voltage (III / 3) | 63 V |
|---------------------------------------|--------|
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2) | 160 V |
| Rated impulse voltage (III / 2) | 2.5 kV |
| Rated voltage (II / 2) | 320 V |
| Rated impulse voltage (II / 2) 2.5 kV | |
| Rated current | 9 A |

Rated data according to UL 1977 / CSA-C22.2 No. 182.3

| Rated voltage | 600 V |
|---------------|--|
| Rated current | USR 9 A, AWG 24 -18 CNR 6 A, AWG 24-20 CNR 9 A, AWG 18 |

Country specific certificates

| VDE / ENEC | EN IEC 60947-7-4 File no.: 40040866 |
|------------|---|
| cURus | UL 1977/CSA-C22.2 No. 182.3 File no.: E-365006 |

| Shear forces according to IEC 62137-1-2. These values are maximum values that apply only for impuls, not for continuous load. | |
|--|------|
| Direction 1 + 2 shear force along | 50 N |
| Direction 3 + 4 shear force across | 20 N |
| Direction 5 pull-off force | 20 N |

SMD Terminal blocks

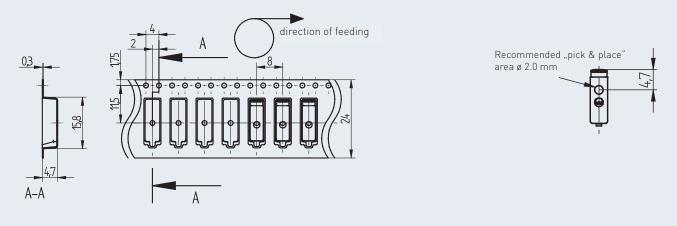
46.131 · SMD-Terminal block - MiniFlex · Instructions for processing



Instructions for soldering process

Suitable for leadfree-reflow-profiles according to DIN EN 61760-1 respective DIN EN 60068-2-58 up to peak-temperature of max. 260°C. Due to different application-specific parameters (component arrangement and alignment, soldering system, solder paste), it is recommended to use test runs to determine a suitable profile under production conditions.

Depending on the SMD soldering process and associated parameters a minor discoloration might occur. However, this will not influence the functionality.



| Storage time | Solderability up to 6 months when stored between -5°C and +40°C and rel. humidity between 1060% r H. After a storage time of 6 months, solderability has to be checked according to J-STD-002D or DIN EN 60068-2-58:2016. | |
|---|--|--|
| max. allowed number of reflow-processes | 3 | |
| Reflow-profile | Reflow-profile (lead-free) $T_{max} = 260 \text{ °C}$ $t_{max} < 10 \text{ sec}$ $T_{L} \ge 230 \text{ °C}$ | |
| Solderability | Solderability of components is checked by wetting test according to J-STD-002D | |
| Assembly method | SMD, according to drawing | |
| Recommended solder stencil thickness | 100 - 150 μm (recommendation BJB 150 μm) | |