

General note: It is recommended to make an electrical connection between both poles of each polarity on the solder pad.

**SMD-Terminal block - Nano with push wire contacts and contact opening function**

**2 pole - 46.142.1001.50**

**Direct insertion of solid wires**

**Contact opening function** - for release of already inserted wires

**Mounting and wiring position: PCB top side**

**Machine-compatible "tape-and-reel" packaging**

Fixing: Lead-free reflow soldering according to DIN EN 610760-1, section 6

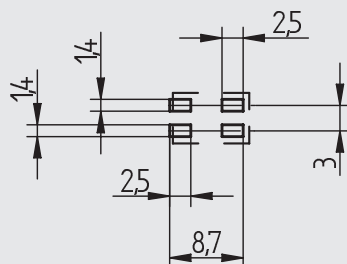
Material: Housing: PPA, white

Contact material: CuNi

Contact surface: hot-dipped tinned

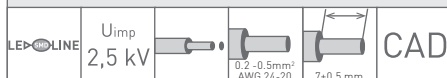
To operate the contact opening function, we recommend the use of our tool 46.141.U801.89

Recommended dimensions for solder tags



#### Packaging data 46.142.1001.50

Weight per piece	0.19 g
Pieces per coil	2.800
Coil diameter	13"
Weight per coil	1.04 kg
Number of coils per carton	18
Number of SMD terminal blocks per carton	50.400
Weight per carton	16 kg
Carton dimensions (LxWxH)	400 x 355 x 365 mm



#### Accessories:

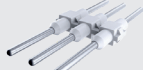
SMD Nano-B2B connector. For connecting PCBs.  
Available in 21 mm length.



46.141.U701.50



46.142.U701.50



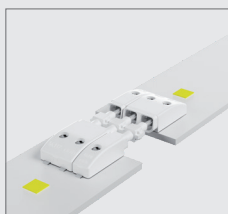
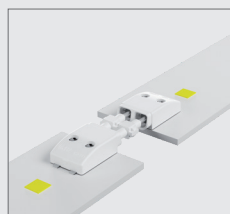
46.143.U701.50

#### Contact opening tool

For release of already inserted wires



46.141.U801.89



# LED - Light and connection technology

## SMD-Terminal block - Nano General technical information



### Connection data

Connection technology	Push wire contacts
Solid wires	0.2 - 0.5 mm <sup>2</sup> , AWG 24-20
Strip length	7 ± 0.5 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 <sup>2</sup>	min. 10 N
0.34 mm <sup>2</sup>	min. 15 N
0.5 mm <sup>2</sup>	min. 20 N
0.75 mm <sup>2</sup>	min. 30 N
Insertion force	max. 10 N

### Geometrical data

Pin spacing	3 mm / 0.12 inch
Width	6 mm / 0.24 inch
Height	2.7 mm / 0.11 inch
Depth	9.3 mm / 0.37 inch
Reel diameter of tape-and-reel packaging	330 mm (13")
Reel width	16 mm
Pitch distance	8 mm
Packaging unit tape-and-reel	2.800
Packaging unit cardboard	50.400 (18 reels)

### Material data

Insulating material group	I
Insulating material	PPA, white
PTI	600
Flammability class, based on UL 94	V0
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°

### 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	3 A

### Rated data according to UL 1977

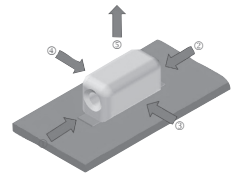
Rated voltage UL 1977	320 VAC / DC
Rated current UL 1977	3 A

### Country specific certificates

VDE ENEC	EN 60947
UL	cURus, File No. E-365006

### Shear forces according to IEC 62137-1-2: 2007.

These values are maximum values that apply only for impuls, not for continuous load.



Direction 1 + 2 shear force along	80
Direction 3 + 4 shear force across	25
Direction 5 pull-off force	25

# SMD-Terminal block - Nano

## Instructions for processing

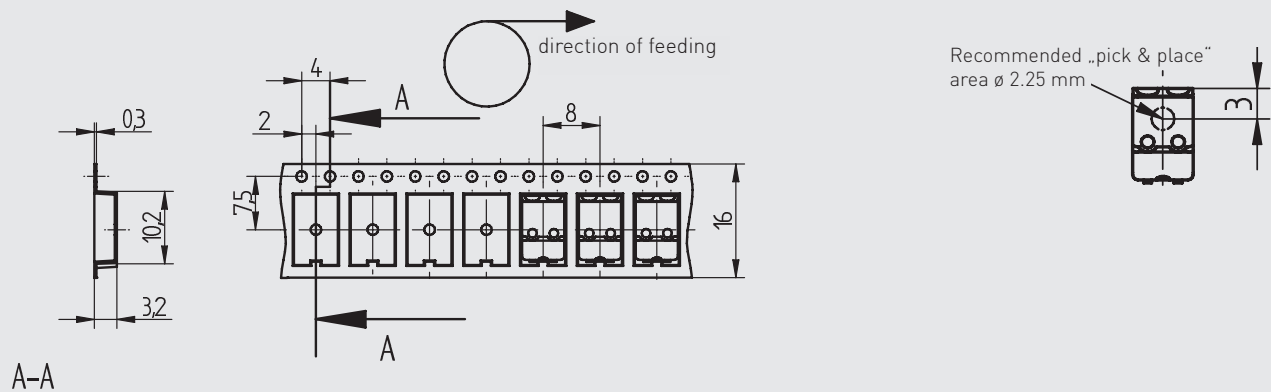


### Instructions for soldering process

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 10...60% 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	<p>Reflow-profile (lead-free)</p>
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)