

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

pkg. wt. part no.
2800 0.4 g 46.142.1001.50

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

2 pole

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

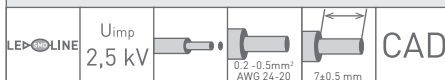
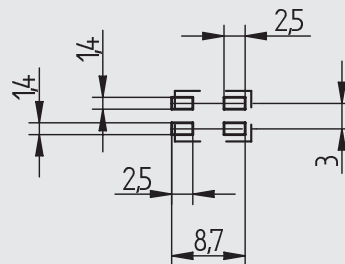
Material: Housing: PPA, white

Contact material: CuNi

Contact surface: hot-dipped tinned 5-10 µm

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

Recommended dimensions for solder tags



Accessories:

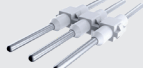
SMD Nano-B2B connector. For connecting PCBs.
Available in 21 mm length.



46.141.U701.50



46.142.U701.50



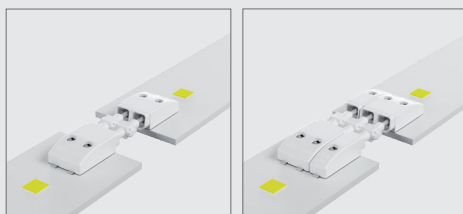
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Contact opening tool

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 ² , 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 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
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 5-10 µm

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

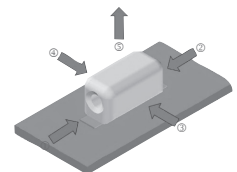
Rated data according to UL 1977

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 DIN 62137-1-2 in [N]



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

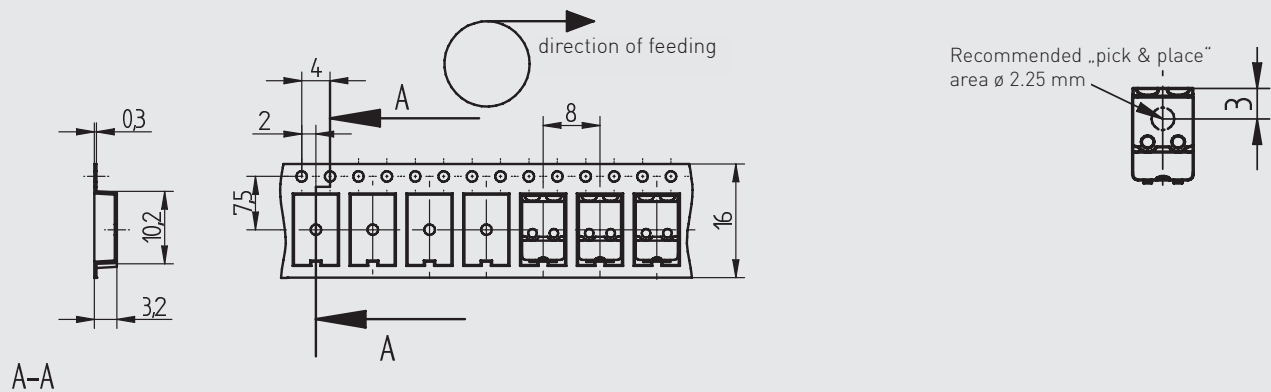


Instructions for soldering process

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)