

LSF-SMD 3.50/07/180 SN BK RL

Weidmüller Interfaces GmbH & Co. KG

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Product image



Similar to illustration

The innovative quick connector - simple, safe and economical:

PCB terminals with spring connection and direct PUSH IN technology. A milestone in connection technology.

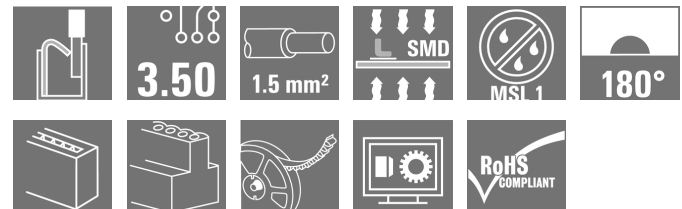
Amazingly simple and simply amazing in practice:

- Connect and easily detach solid wires or wires with wire-end ferrules without using tools
- Processed automatically in the reflow or vapour phase
- Potentials and clamping points marked clearly by coloured push buttons

World-class design-in and processing phases, and suitable for a vast range of applications.

PCB terminal for fully automatic assembly using reflow soldering (SMD), with PUSH IN wire connections. Conductor insertion and slider operation from the same direction (TOP).

- **Solid & flexible conductors with wire-end ferrules need only to be inserted and they are ready.**
- **When connecting stranded wires without wire-end ferrules the actuating element is used to open the terminal point**
- **Intuitive handling – since the wire-entry area and handling area are clearly separated.**
- **Packaged in tape-on-reel**
- **Conductor outlet direction 180°**



General ordering data

| | |
|--------------|--|
| Version | Printed circuit board terminals, 3.50 mm, Number of poles: 7, 180°, black, PUSH IN, Clamping range, max. : 1.5 mm², Tape |
| Order No. | 1250420000 |
| Type | LSF-SMD 3.50/07/180 SN BK RL |
| GTIN (EAN) | 4050118041217 |
| Qty. | 180 pc(s). |
| Product data | IEC: 320 V / 17.5 A / 0.2 - 1.5 mm² UL: 300 V / 12 A / AWG 24 - AWG 16 |
| Packaging | Tape |

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Technical data

Dimensions and weights

| | | | |
|--------------------------|---------|-----------------|------------|
| Depth | 10.5 mm | Depth (inches) | 0.413 inch |
| Height | 16.3 mm | Height (inches) | 0.642 inch |
| Height of lowest version | 16.3 mm | Net weight | 5.62 g |
| Width | 25.2 mm | Width (inches) | 0.992 inch |

System parameters

| | | | |
|--|------------------------------|--|------------------------|
| Product family | OMNIMATE Signal - series LSF | Wire connection method | PUSH IN |
| Mounting onto the PCB | SMD solder connection | Conductor outlet direction | 180° |
| Pitch in mm (P) | 3.5 mm | Pitch in inches (P) | 0.138 inch |
| Number of poles | 7 | Pin series quantity | 1 |
| Fitted by customer | No | Coplanarity: | 100 µm |
| Number of solder pins per pole | 2 | Stripping length | 8 mm |
| L1 in mm | 21 mm | L1 in inches | 0.828 inch |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20 | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Volume resistance | 1.60 mΩ | | |

Material data

| | | | |
|---------------------------------------|--------------|---------------------------------------|---------------------|
| Insulating material | LCP GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | Illa |
| Comparative Tracking Index (CTI) | ≥ 175 | Insulation strength | ≥ 10 ⁸ Ω |
| Moisture Level (MSL) | 1 | UL 94 flammability rating | V-0 |
| Contact material | Copper alloy | Layer structure of solder connection | 4...6 µm Sn matt |
| Storage temperature, min. | -40 °C | Storage temperature, max. | 70 °C |
| Operating temperature, min. | -50 °C | Operating temperature, max. | 120 °C |
| Temperature range, installation, min. | -30 °C | Temperature range, installation, max. | 120 °C |

Conductors suitable for connection

| | | | |
|---|--|---|----------------------|
| Clamping range, min. | 0.13 mm ² | Clamping range, max. | 1.5 mm ² |
| Wire connection cross section AWG, min. | AWG 28 | Wire connection cross section AWG, max. | AWG 14 |
| Solid, min. H05(07) V-U | 0.2 mm ² | Solid, max. H05(07) V-U | 1.5 mm ² |
| Flexible, min. H05(07) V-K | 0.2 mm ² | Flexible, max. H05(07) V-K | 1.5 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.25 mm ² | w. plastic collar ferrule, DIN 46228 pt 4, max. | 0.75 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.25 mm ² | w. wire end ferrule, DIN 46228 pt 1, max. | 1.5 mm ² |
| Reference text | Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P) | | |

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Rated data acc. to IEC

| | | | |
|---|------------------------|---|------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 17.5 A |
| Rated current, max. number of poles (Tu=20°C) | 16 A | Rated current, min. number of poles (Tu=40°C) | 17.5 A |
| Rated current, max. number of poles (Tu=40°C) | 14 A | Rated voltage for surge voltage class / pollution degree II/2 | 320 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 160 V | Rated voltage for surge voltage class / pollution degree III/3 | 160 V |
| Rated impulse voltage for surge voltage class/ pollution degree II/2 | 2.5 kV | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 2.5 kV |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 2.5 kV | Short-time withstand current resistance | 3 x 1s with 80 A |

Rated data acc. to CSA

| | | | |
|-----------------------------------|---|-----------------------------------|----------------|
| Institute (CSA) |  | Certificate No. (CSA) | 200039-1664286 |
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group D / CSA) | 300 V |
| Rated current (Use group B / CSA) | 10 A | Rated current (Use group D / CSA) | 10 A |
| Wire cross-section, AWG, min. | AWG 28 | Wire cross-section, AWG, max. | AWG 14 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|---|---------------------------------------|--------|
| Institute (cURus) |  | Certificate No. (cURus) | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V | Rated voltage (Use group D / UL 1059) | 300 V |
| Rated current (Use group B / UL 1059) | 12 A | Rated current (Use group D / UL 1059) | 10 A |
| Wire cross-section, AWG, min. | AWG 24 | Wire cross-section, AWG, max. | AWG 16 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|---|---------|---|-------------------------------|
| Packaging | Tape | VPE length | 0.33 m |
| VPE width | 0.33 m | VPE height | 0.07 m |
| Tape depth (T2) | 17.6 mm | Tape width (W) | 56 mm |
| Tape pocket depth (K0) | 17.1 mm | Tape pocket height (A0) | 11.2 mm |
| Tape pocket width (B0) | 43.7 mm | Tape pocket separation (P1) | 20 mm |
| Tape hole separation (E) | 1.75 mm | Tape pocket separation (F) | 26.2 mm |
| Tape reel diameter \varnothing (A) | 330 mm | Surface resistance | $R_s = 10^9 - 10^{12} \Omega$ |
| Width Pick & Place Pad (W _{PPP}) | 7.5 mm | Length Pick & Place Pad (L _{PPP}) | 8.5 mm |
| Diameter of the withdrawal surface (\varnothing D _{max}) | 9 mm | | |

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Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002643 | ETIM 7.0 | EC002643 |
| eClass 9.0 | 27-44-04-01 | eClass 9.1 | 27-44-04-01 |
| eClass 10.0 | 27-44-04-01 | eClass 11.0 | 27460101 |

Important note

IPC conformity Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Approvals

Approvals



ROHS Conform
 UL File Number Search E60693

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | FL DRIVES EN PI OMNIMATE LSF SMD EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN |
| Engineering Data | STEP |
| Engineering Data | EPLAN, WSCAD |

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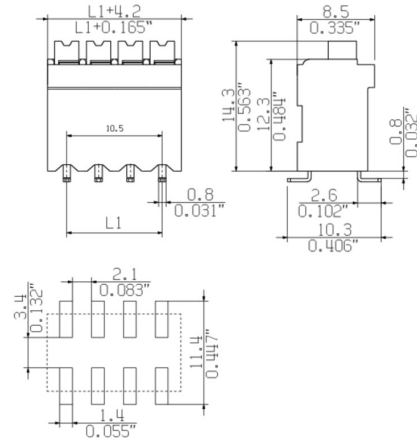
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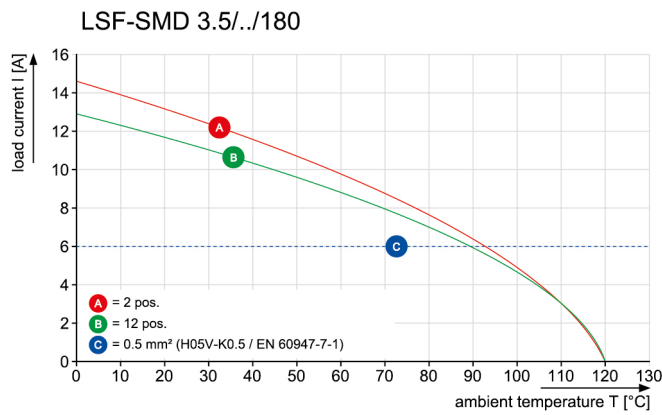
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Drawings

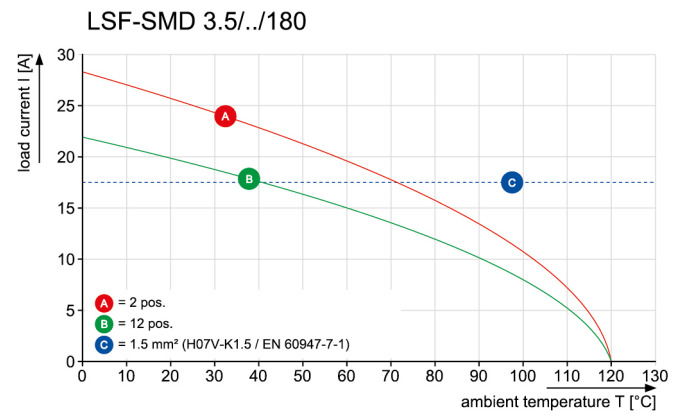
Dimensional drawing info@weidmueller.com



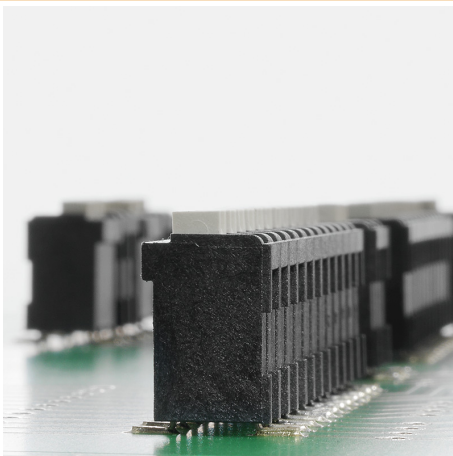
Graph



Graph

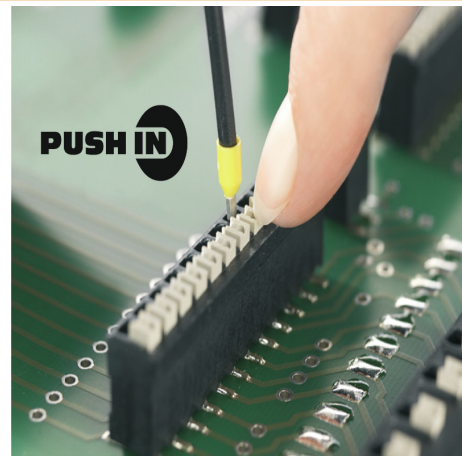


Product benefits



Stable solder connection

Product benefits



PUSH IN wire connection

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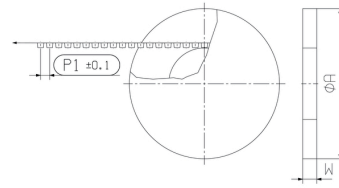
Drawings

Product benefits



Packaged in tape-on-reel

Dimensional drawing



Dimensional drawing

