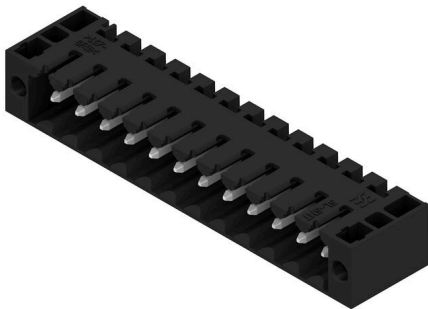


SL-SMT 3.50/12/90F 3.2SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Product image



High-temperature-resistant male header, 3.50 mm pitch.

- Plugging direction parallel (90°), straight 180° or angled (135°) to PCB
- Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)
- Optimised for the SMT process
- Pin length 3.2 mm universal for all soldering methods
- Pin length 1.5 mm optimised for reflow soldering methods
- Packed either in a box (BX) or tape-on-reel (RL)
- Male header can be coded

General ordering data

| | |
|--------------|---|
| Version | PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 12, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box |
| Order No. | 1842180000 |
| Type | SL-SMT 3.50/12/90F 3.2SN BK BX |
| GTIN (EAN) | 4032248353538 |
| Qty. | 36 items |
| Product data | IEC: 320 V / 15 A UL: 300 V / 10 A |
| Packaging | Box |

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Technical data

Approvals

Approvals



| | |
|-----------------------|----------------------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (UR) | E60693 |

Dimensions and weights

| | | | |
|--------------------------|-------------|-----------------|-------------|
| Depth | 11.1 mm | Depth (inches) | 0.437 inch |
| Height | 10.7 mm | Height (inches) | 0.4213 inch |
| Height of lowest version | 7.5 mm | Width | 49 mm |
| Width (inches) | 1.9291 inch | Net weight | 4.56 g |

Environmental Product Compliance

| | | | |
|--------------------------|-----------------------------|------------------|--|
| RoHS Compliance Status | Compliant without exemption | | |
| REACH SVHC | No SVHC above 0.1 wt% | | |
| Product Carbon Footprint | Cradle to gate | 0,044 kg CO2 eq. | |

System specifications

| | | | |
|--|--|---------------------|-------------|
| Product family | OMNIMATE Signal - series BL/SL 3.50 | | |
| Type of connection | Board connection | | |
| Mounting onto the PCB | THT/THR solder connection | | |
| Pitch in mm (P) | 3.50 mm | | |
| Pitch in inches (P) | 0.138 " | | |
| Outgoing elbow | 90° | | |
| Number of poles | 12 | | |
| Number of solder pins per pole | 1 | | |
| Solder pin length (l) | 3.2 mm | | |
| Solder pin length tolerance | 0 / -0.3 mm | | |
| Solder pin dimensions | d = 1.2 mm, Octagonal | | |
| Solder pin dimensions = d tolerance | 0 / -0,03 mm | | |
| Solder eyelet hole diameter (D) | 1.4 mm | | |
| Solder eyelet hole diameter tolerance (D) | + 0,1 mm | | |
| Outside diameter of solder pad | 2.3 mm | | |
| Template aperture diameter | 2.1 mm | | |
| L1 in mm | 38.50 mm | | |
| L1 in inches | 1.516 " | | |
| Number of rows | 1 | | |
| Pin series quantity | 1 | | |
| Touch-safe protection acc. to DIN VDE 57 106 | finger-safe plugged/ back-of-hand-safe unplugged | | |
| Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10 unplugged | | |
| Protection degree | IP10 | | |
| Volume resistance | ≤5 mΩ | | |
| Can be coded | Yes | | |
| Plugging cycles | 25 | | |
| Plugging force/pole, max. | 6 N | | |
| Pulling force/pole, max. | 6 N | | |
| Tightening torque | Torque type | Mounting screw, PCB | |
| | Usage information | Tightening torque | min. 0.1 Nm |

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| | | | |
|-------------------|-------------|------|--|
| | | max. | 0.15 Nm |
| Recommended screw | Part number | | PTSC KA 2.2X4.5 WN1412 |

Material data

| | | | |
|---------------------------------------|---------------------------|---------------------------------------|---------------------------|
| Insulating material | LCP GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 175 | Moisture Level (MSL) | 1 |
| UL 94 flammability rating | V-0 | Contact material | Cu-alloy |
| Contact surface | tinned | Layer structure of solder connection | 2...3 µm Ni / 5...7 µm Sn |
| Layer structure of plug contact | 2...3 µm Ni / 5...7 µm Sn | Storage temperature, min. | -40 °C |
| Storage temperature, max. | 70 °C | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 100 °C | Temperature range, installation, min. | -30 °C |
| Temperature range, installation, max. | 100 °C | | |

Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 15 A |
| Rated current, max. number of poles (Tu=20°C) | 12 A | Rated current, min. number of poles (Tu=40°C) | 13 A |
| Rated current, max. number of poles (Tu=40°C) | 10 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 100 A |

Rated data acc. to CSA

| | | | |
|-----------------------------------|--|-----------------------------------|----------------|
| Institute (CSA) | CSA | Certificate No. (CSA) | 200039-1176845 |
| 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 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (UR) | UR | Certificate No. (UR) | 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) | 10 A | Rated current (Use group D / UL 1059) | 10 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|-----------|------------|-----------|
| Packaging | Box | VPE length | 342.00 mm |
| VPE width | 134.00 mm | VPE height | 22.00 mm |

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. |
|----------------|--|

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fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Notes

- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- Diameter of solder eyelet D = 1.4+0.1mm
- Solder eyelet diameter D = 1.5 + 0.1 mm, from 9 poles
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- For additional mechanical support for male connectors with screw flange (...F), we recommend an additional cable gland with fastening screws (sheet metal screw ISO 1481-ST 2.2x4.5 C or ISO 7049-ST 2.2x4.5 C – see Accessories). Cable gland only permitted before soldering.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002637 | ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 | | |

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Drawings

Product image



Dimensional drawing



L1 = 38.50 mm | P = 3.50 mm