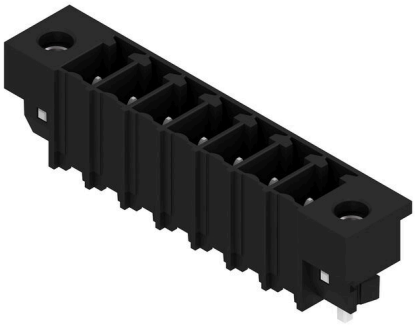
Data sheet

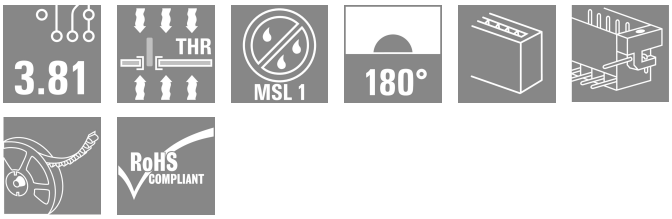
SC-SMT 3.81/07/180LF 1.5SN BK RL

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

www.weidmueller.com

Product image





High-temperature-resistant pin header (SC-SMT 180LF) in 3.81-mm pitch (0.15 inch)
- Plugging direction is perpendicular to PCB (standing)
- With solder flange (LF).
- Packed either in box (BX) or on anti-static roll (tape-on-reel, RL)
- Pin length of either 1.5 mm or 3.2 mm

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of standard connectors and offer space for labelling.

General ordering data

Version	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 3.81 mm, Number of poles: 7, 180°, Solder pin length (l): 1.5 mm, tinned, black, Tape
Order No.	1864270000
Type	SC-SMT 3.81/07/180LF 1.5SN BK RL
GTIN (EAN)	4032248429578
Qty.	300 items
Product data	IEC: 320 V / 17.5 A UL: 300 V / 11 A
Packaging	Tape

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Dimensions and weights

Depth	7.1 mm	Depth (inches)	0.2795 inch
Height	10.7 mm	Height (inches)	0.4213 inch
Height of lowest version	9.2 mm	Width	36.96 mm
Width (inches)	1.4551 inch	Net weight	2.62 g

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System specifications

Product family	OMNIMATE Signal - series BC/SC 3.81	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.150 "	Outgoing elbow	180°
Number of poles	7	Number of solder pins per pole	1
Solder pin length (l)	1.5 mm	Solder pin length tolerance	0 / -0,02 mm
Solder pin dimensions	d = 1.0 mm, Octagonal	Solder pin dimensions = d tolerance	0 / -0,04 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
Outside diameter of solder pad	2.1 mm	Template aperture diameter	1.9 mm
L1 in mm	22.86 mm	L1 in inches	0.900 "
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106	finger-safe unplugged/ back-of-hand-safe plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Volume resistance	≤5 mΩ	Can be coded	Yes

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	Copper alloy
Contact surface	tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

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)	13.9 A	Rated current, min. number of poles (Tu=40°C)	17 A

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Rated current, max. number of poles (Tu=40°C)	12.4 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 76 A

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated current (Use group B / CSA)	11 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 (cURus)	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)	11 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

ESD Level packaging	static dissipative	Packaging	Tape
VPE length	330.00 mm	VPE width	56.00 mm
VPE height	28.00 mm	Tape depth (T2)	14.40 mm
Tape width (W)	56 mm	Tape pocket depth (K0)	13.90 mm
Tape pocket height (A0)	7.60 mm	Tape pocket width (B0)	42.35 mm
Tape pocket separation (P1)	16.00 mm	Tape hole separation (E)	1.75 mm
Tape pocket separation (F)	26.20 mm	Tape reel diameter ⌀ (A)	330 mm
Surface resistance	Rs = 109 - 1012 Ω	Width Pick & Place Pad (WPPP)	6.7 mm
Length Pick & Place Pad (LPPP)	12.5 mm	Diameter of the withdrawal surface (ø Dmax)	6 mm
Protrusion 1 Pick & Place Pad (L01 (PPP))	6.25 mm	Protrusion 2 Pick & Place Pad (P02 (PPP))	6.25 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. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	• Additional variants on request • Rated current related to rated cross-section & min. No. of poles. • 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. • P on drawing = pitch • 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

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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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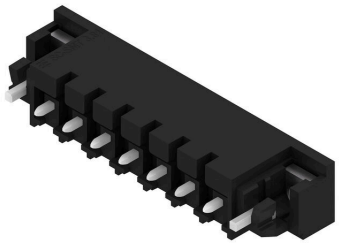
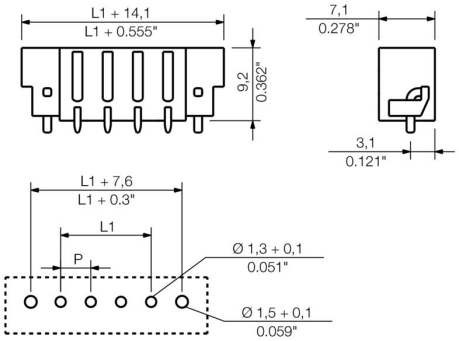
Drawings

Product image

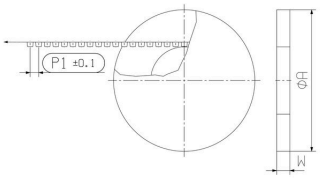


Dimensional drawing

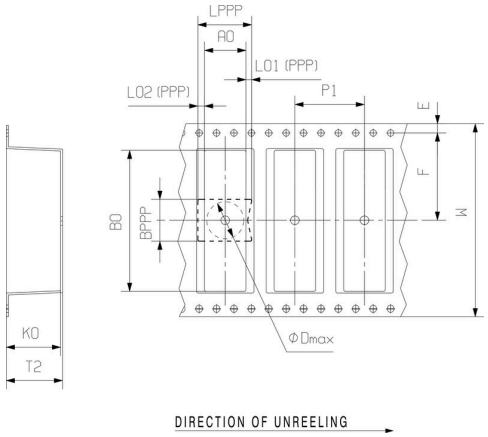


Example of use

Dimensional drawing



Dimensional drawing



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Accessories

Coding elements

Only connects what is supposed to be connected: the right connection at the right place.
Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase.
The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible.
The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

Type	SC-SMT 3.81 KO BK BX	Version
Order No.	2460700000	PCB plug-in connector, Accessories, Coding element, black
GTIN (EAN)	4050118480023	
Qty.	100 ST	
Type	SC-SMT 3.81 KO WT BX	Version
Order No.	2467670000	PCB plug-in connector, Accessories, Coding element, white
GTIN (EAN)	4050118494693	
Qty.	100 ST	