

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Product image



Similar to illustration

The inverted BCL-SMT socket block for the PCB offers three significant advantages:

- The BCL-SMT offers touch-safe security on the PCB which makes it ideal for live, current-carrying outputs.
- The BCL-SMT widens the range of applications with board-to-board connections between component assemblies.
- The BCL-SMT is reflow-compatible and can be seamlessly integrated into the automatic assembly and soldering process.

Two outlet directions give you a choice of position and thus more design flexibility.

- 180° standing
- 90° recumbent

Two housing variants are available for the BCL-SMT:

- Without flange
- With inverted solder flange ("LFI", with nut)
- · Fastened to PCB without additional screw
 - · Fastened with screw to the SCZ FI

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



















BCL-SMT 3.81/04/180 1.5SN BK BX
<u>1976520000</u>
PCB plug-in connector, female header, closed side, THT/THR solder connection, 3.81 mm, Number of poles: 4, 180°, Solder pin length (I): 1.5 mm, tinned, black, Box
4032248679003
50 pc(s).
IEC: 320 V / 17.5 A UL: 300 V / 10 A
Вох



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Technical data

Dimensions and weights

Net weight	1.88 g	

System specifications

Product family	OMNIMATE Signal - series	Type of connection	
	BC/SC 3.81		Board connection
Mounting onto the PCB	THT/THR solder	Pitch in mm (P)	
	connection		3.81 mm
Pitch in inches (P)	0.15 inch	Outgoing elbow	180°
Number of poles	4	Number of solder pins per pole	2
Solder pin length (I)	1.5 mm	Solder pin length tolerance	0 / -0,02 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 0.8 mm
Solder pin dimensions = d tolerance	+0,05 / -0,05 mm	Solder eyelet hole diameter (D)	1.2 mm
Solder eyelet hole diameter tolerance (D)+ 0,1 mm	Outside diameter of solder pad	1.9 mm
Template aperture diameter	1.6 mm	L1 in mm	11.43 mm
L1 in inches	0.45 inch	Number of rows	1
Pin series quantity		Touch-safe protection acc. to DIN VDE	
	1	57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE		Volume resistance	
0470	IP 20		≤ 5mΩ
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, max.	9.5 N	Pulling force/pole, max.	6 N

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
GWIT	930 °C	GWFI	960 °C
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	1-3 µm Ni / 2-4 µm Sn matt	Layer structure of plug contact	1-3 µm Ni / 2-4 µm Sn matt
Storage temperature, min.	-25 ℃	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	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		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	15.4 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	13.8 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



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Technical data

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	50 V
Rated current (Use group B / CSA)	11 A	Rated current (Use group C / CSA)	11 A

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

Rated voltage (Use group B / UL 1059) 300 V Rated current (Use group B / UL 1059) 10 A

Rated current (Use group B / UL 1059)
Reference to approval values

Specifications are maximum values, details see approval certificate. E60693

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group D / UL 1059) 10 A

Packing

Packaging	Box	VPE length	25 mm
VPE width	90 mm	VPE height	125 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02	UNSPSC	30-21-18-01

Notes

Notes

- · Rated current related to rated cross-section & min. No. of 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.

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



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Technical data

Downloads

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN
	MB SMT EN
	FL DRIVES DE
	MB DEVICE MANUF. EN
	CAT 2 PORTFOLIOGUIDE EN
	FL BUILDING SAFETY EN
	FL APPL LED LIGHTING EN
	FL INDUSTR.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	EPLAN, WSCAD
Engineering Data	<u>STEP</u>
White paper surface mount technology	Download Whitepaper



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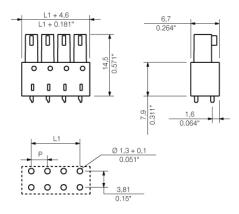
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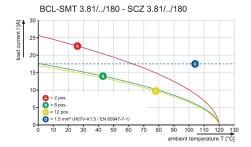
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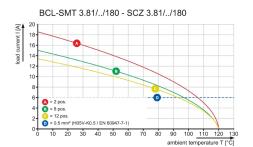
Drawings

Dimensional drawing



Graph Graph







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Mating connector (fully pluggable)

SCDV 3.81/90G



Two-tier SCDV pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at two offset levels and with open access to each row.
- · Space for labelling and coding
- · Packed in cardboard box.

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 and coding.

General ordering data

Туре	SCDV 3.81/08/90G 3.2SN	Version	Product data	Packaging
Order No.	1032280000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248771578	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		
Туре	SCDV 3.81/08/90G 3.2SN	Version	Product data	Packaging
Order No.	1032120000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248771424	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		
Туре	SCDV 3.81/08/90G 3.2SN	Version	Product data	Packaging
Order No.	1032450000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248771721	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		

SC-SMT 3.81/270G



The SC-SMT pin header in 270°-outlet direction: the 270° angle exists between the plugging direction and the solder pin. The plugging direction is then parallel to the PCB. Sockets blocks, however, have an overhead plugging angle.

- More freedom when designing components and devices.
- A high component density when multiple PCBs are arranged in parallel within one housing
- The housing design is application-friendly because of the additional optional wire outlet direction.
- Available in closed (G) and screw flange (F) versions.
- 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 and coding.

Туре	SC-SMT 3.81/04/270G 3.2	Version	Product data	Packaging
Order No.	<u>1036510000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248765102	connection, 3.81 mm, Number of poles: 4, 270°, Solder pin length (I)	: UL: 300 V / 11 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		



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Mating connector (fully pluggable)

Туре	SC-SMT 3.81/04/270G 1.5	Version	Product data	Packaging
Order No.	1036850000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248765430	connection, 3.81 mm, Number of poles: 4, 270°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	1.5 mm, tinned, black, Box		
Туре	SC-SMT 3.81/04/270G 1.5	Version	Product data	Packaging
Order No.	<u>1036670000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248765287	connection, 3.81 mm, Number of poles: 4, 270°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	1.5 mm, tinned, Pale green, Box		

SC 3.81/90G



The SC pin header has a parallel (recumbent) plugging direction in relation to the PCB. It is available in closed (G) and screw flange (F) versions.

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of standard connectors. They support a flood-light display and offer space for labelling and coding.

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Туре	SC 3.81/04/90G 3.2SN BK	Version	Product data	Packaging
Order No.	<u>1793150000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248227648	connection, 3.81 mm, Number of poles: 4, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SC 3.81/04/90G 3.2SN OR	Version	Product data	Packaging
Order No.	<u>1942070000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248655502	connection, 3.81 mm, Number of poles: 4, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		
Туре	SC 3.81/04/90G 3.2SN GN	Version	Product data	Packaging
Order No.	<u>1793260000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248227730	connection, 3.81 mm, Number of poles: 4, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		



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Mating connector (fully pluggable)

SC 3.81/270G



The SC pin header in 270°-outlet direction: the 270° angle exists between the plugging direction and the solder pin. The plugging direction is then parallel to the PCB. Sockets blocks, however, have an overhead plugging angle.

- More freedom when designing components and devices.
- A high component density when multiple PCBs are arranged in parallel within one housing
- The housing design is application-friendly because of the additional optional wire outlet direction.
- Available in closed (G) and screw flange (F) versions.

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 and coding.

General ordering data

Туре	SC 3.81/04/270G 3.2SN B	Version	Product data	Packaging
Order No.	1037890000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248766444	connection, 3.81 mm, Number of poles: 4, 270°, Solder pin length (I): UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SC 3.81/04/270G 3.2SN G	Version	Product data	Packaging
Order No.	1037680000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248766291	connection, 3.81 mm, Number of poles: 4, 270°, Solder pin length (I): UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		
Туре	SC 3.81/04/270G 3.2SN O	Version	Product data	Packaging
Order No.	1037520000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248766147	connection, 3.81 mm, Number of poles: 4, 270°, Solder pin length (I): UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		

SCDN-THR 3.81/90G



Extra flat high-temperature-resistant two-tier SCDN-THR pin header for reflow soldering.

- Two compact interfaces are used with the flat BCF 3.81 (PUSH IN) socket block.
- Available as 90° (recumbent).
- Connections on a single level, allowing access that is flush over the front board.
- · Space for labelling and coding
- · Packed in cardboard box.

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 and coding.

General ordering data

T	уре	SCDN-THR 3.81/08/90G 1	Version	Product data	Packaging
O	rder No.	1039290000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
G	TIN (EAN)	4032248772612	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Q	ty.	50 pc(s).	1.5 mm, tinned, black, Box		

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Mating connector (fully pluggable)

Туре	SCDN-THR 3.81/08/90G 3	Version	Product data	Packaging
Order No.	1038970000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248772315	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SCDN-THR 3.81/08/90G 1	Version	Product data	Packaging
Order No.	<u>1039130000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248772469	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 11 A	

SC-SMT 3.81/180G Tape



High-temperature-resistant pin header (SC-SMT 180G) in 3.81-mm pitch (0.15 inch)

- Plugging direction is perpendicular to PCB (standing)
- Closed (G).
- Packed either in box (BX) or on anti-static roll (tape-onreel, 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 and coding.

Туре	SC-SMT 3.81/04/180G 3.2	Version	Product data	Packaging
Order No.	1863490000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Tape
GTIN (EAN)	4032248428571	connection, 3.81 mm, Number of poles: 4, 180°, Solder pin length (I)	: UL: 300 V / 11 A	
Qty.	300 pc(s).	3.2 mm, tinned, black, Tape		
Туре	SC-SMT 3.81/04/180G 1.5	Version	Product data	Packaging
Type Order No.	SC-SMT 3.81/04/180G 1.5 1864290000	Version PCB plug-in connector, male header, closed side, THT/THR solder	Product data IEC: 320 V / 17.5 A	Packaging Tape
• •	, ,		IEC: 320 V / 17.5 A	



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Mating connector (fully pluggable)

SC 3.81/135G



The SC pin header with 135° wire outlet direction: the 135° angle exists between the plugging direction and the solder pin. The wire outlet direction is then diagonal or 45° to the PCB.

- More freedom when designing components and devices.
- Easy access and a high component density when multiple interfaces are arranged in parallel within a single plugging area
- The housing design is application-friendly because of the additional optional wire outlet direction.
- Available in closed (G) and screw flange (F) versions.

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 and coding.

General ordering data

Туре	SC 3.81/04/135G 3.2SN G	Version	Product data	Packaging
Order No.	<u>1976030000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248684373	connection, 3.81 mm, Number of poles: 4, 135°, Solder pin length (I)	: UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		
Туре	SC 3.81/04/135G 3.2SN B	Version	Product data	Packaging
Order No.	<u>1976420000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248684526	connection, 3.81 mm, Number of poles: 4, 135°, Solder pin length (I)	: UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SC 3.81/04/135G 3.2SN O	Version	Product data	Packaging
Order No.	1975800000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248684168	connection, 3.81 mm, Number of poles: 4, 135°, Solder pin length (I)	: UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		

SCD-THR 3.81/90G



High-temperature-resistant two-tier SCD-THR pin header for reflow soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at the same level and with access that is flush over the front board.
- · Space for labelling and coding
- Packed in cardboard box.

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 and coding.

General ordering data

Туре	SCD-THR 3.81/08/90G 3.2	Version	Product data	Packaging
Order No.	<u>1973750000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248683260	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		

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Mating connector (fully pluggable)

Туре	SCD-THR 3.81/08/90G 1.5	Version	Product data	Packaging
Order No.	<u>1974050000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248683567	connection, 3.81 mm, Number of poles: 8, $90^{\circ}\text{, Solder pin length (I):}$	UL: 300 V / 11 A	
Qty.	50 pc(s).	1.5 mm, tinned, black, Box		

SCDV 3.81/180G



Two-tier SCDV pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 180° (standing).
- Connections at two offset levels and open access to each row.
- · Space for labelling and coding
- Packed in cardboard box.

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 and coding.

General ordering data

Туре	SCDV 3.81/08/180G 3.2SN	Version	Product data	Packaging
Order No.	1034840000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248763634	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SCDV 3.81/08/180G 3.2SN	Version	Product data	Packaging
Order No.	<u>1034510000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248763337	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		
Туре	SCDV 3.81/08/180G 3.2SN	Version	Product data	Packaging
Order No.	<u>1034670000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248763481	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		

SC-SMT 3.81/90G Tape



High-temperature-resistant pin header (SC-SMT 90G) in 3.81-mm pitch (0.15 inch)

- Plugging direction parallel to PCB (recumbent)
- Closed (G)
- Packed either in box (BX) or on anti-static roll (tape-onreel BL)
- 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 and coding.

General ordering data

Туре	SC-SMT 3.81/04/90G 1.5S	Version	Product data	Packaging
Order No.	1863160000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Tape
GTIN (EAN)	4032248428359	connection, 3.81 mm, Number of poles: 4, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	400 pc(s).	1.5 mm, tinned, black, Tape		

Creation date May 3, 2020 4:04:25 AM CEST



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Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Mating connector (fully pluggable)

Туре	SC-SMT 3.81/04/90G 3.2S	Version	Product data	Packaging
Order No.	1862860000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Tape
GTIN (EAN)	4032248427796	connection, 3.81 mm, Number of poles: 4, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	400 pc(s).	3.2 mm, tinned, black, Tape		

SC-SMT 3.81/90G Box



High-temperature-resistant pin header (SC-SMT 90G) in 3.81-mm pitch (0.15 inch)

- Plugging direction parallel to PCB (recumbent)
- Closed (G)
- Packed either in box (BX) or on anti-static roll (tape-onreel, 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 and coding.

General ordering data

Туре	SC-SMT 3.81/04/90G 3.2S	Version	Product data	Packaging
Order No.	1862490000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248427628	connection, 3.81 mm, Number of poles: 4, 90° , Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SC-SMT 3.81/04/90G 1.5S	Version	Product data	Packaging
Type Order No.	SC-SMT 3.81/04/90G 1.5S 1862980000	Version PCB plug-in connector, male header, closed side, THT/THR solder	Product data IEC: 320 V / 17.5 A	Packaging Box
	, ,			0 0

SCDV-THR 3.81/90G



High-temperature-resistant two-tier SCDV-THR pin header for reflow soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at two offset levels and open access to each row.
- · Space for labelling and coding
- Packed in cardboard box.

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 and coding.

Туре	SCDV-THR 3.81/08/90G 3	Version	Product data	Packaging
Order No.	1033520000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248762439	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		



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Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Mating connector (fully pluggable)

Туре	SCDV-THR 3.81/08/90G 1	Version	Product data	Packaging
Order No.	1033840000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248762736	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	1.5 mm, tinned, black, Box		
Туре	SCDV-THR 3.81/08/90G 1	Version	Duralizat data	Da alsa siisa si
1,400	3CDV-1HR 3.61/00/30G 1	version	Product data	Packaging
Order No.	1033670000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
	, ,			0 0

SCD-THR 3.81/180G



High-temperature-resistant two-tier SCD-THR pin header for reflow soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at the same level and with access that is flush over the front board.
- · Space for labelling and coding
- Packed in cardboard box.

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 and coding.

General ordering data

Туре	SCD-THR 3.81/08/180G 1	Version	Product data	Packaging
Order No.	1031320000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248760350	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	1.5 mm, tinned, black, Box		
Туре	SCD-THR 3.81/08/180G 3	Version	Product data	Packaging
Order No.	<u>1030970000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248760053	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I):	UL: 300 V / 11 A	

SC 3.81/180G



The SC pin header has a perpendicular (standing) plugging direction in relation to the PCB. It is available in closed (G) and screw flange (F) versions. 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 and coding.

Туре	SC 3.81/04/180G 3.2SN G	Version	Product data	Packaging
Order No.	<u>1793630000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248230754	connection, 3.81 mm, Number of poles: 4, 180°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Mating connector (fully pluggable)

Туре	SC 3.81/04/180G 3.2SN 0	Version	Product data	Packaging
Order No.	1942860000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248654734	connection, 3.81 mm, Number of poles: 4, 180°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		
Туре	SC 3.81/04/180G 3.2SN B	Version	Product data	Packaging
Order No.	<u>1793540000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248230457	connection, 3.81 mm, Number of poles: 4, 180°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		

SCD 3.81/90G



Two-tier SCD pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at the same level and with access that is flush over the front board.
- · Space for labelling and coding
- · Packed in cardboard box.

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 and coding.

Туре	SCD 3.81/08/90G 3.2SN B	Version	Product data	Packaging
Order No.	<u>1973120000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248682683	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SCD 3.81/08/90G 3.2SN G	Version	Product data	Packaging
Order No.	<u>1972960000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248682539	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		
Туре	SCD 3.81/08/90G 3.2SN O	Version	Product data	Packaging
Order No.	<u>1972810000</u>	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248682386	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		



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Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Mating connector (fully pluggable)

SCD 3.81/180G



Two-tier SCD pin header for wave soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 180° (standing).
- Connections at the same level and with access that is flush over the front board.
- Space for labelling and coding
- · Packed in cardboard box.

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 and coding.

General ordering data

Туре	SCD 3.81/08/180G 3.2SN	Version	Product data	Packaging
Order No.	1030280000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248759453	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I)	: UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SCD 3.81/08/180G 3.2SN	Version	Product data	Packaging
Order No.	1029950000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248759057	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I)	: UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		
Туре	SCD 3.81/08/180G 3.2SN	Version	Product data	Packaging
Order No.	1030120000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248759231	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I)	: UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, Pale green, Box		

SCDV-THR 3.81/180G



High-temperature-resistant two-tier SCDV-THR pin header for reflow soldering.

- It allows you to use two interfaces on only one surface and with only one step in the work flow.
- Outlet direction: 90° (recumbent)
- Connections at two offset levels and open access to each row.
- Space for labelling and coding
- · Packed in cardboard box.

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 and coding.

General ordering data

Туре	SCDV-THR 3.81/08/180G 3	Version	Product data	Packaging
Order No.	1035490000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248764259	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I):	UL: 300 V / 11 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Туре	SCDV-THR 3.81/08/180G 1	Version	Product data	Packaging
Type Order No.	SCDV-THR 3.81/08/180G 1 1035660000	Version PCB plug-in connector, male header, closed side, THT/THR solder	Product data IEC: 320 V / 17.5 A	Packaging Box
	, ,		IEC: 320 V / 17.5 A	0 0

Creation date May 3, 2020 4:04:25 AM CEST



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Mating connector (fully pluggable)

Туре	SCDV-THR 3.81/08/180G 1	Version	Product data	Packaging
Order No.	1035810000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248763900	connection, 3.81 mm, Number of poles: 8, 180°, Solder pin length (I): UL: 300 V / 11 A		
Qty.	50 pc(s).	1.5 mm, tinned, black, Box		

SC-SMT 3.81/135G



The high-temperature-resistant SC-SMT pin header with 135° wire outlet direction: the 135° angle exists between the plugging direction and the solder pin. The wire outlet direction is then diagonal or 45° to the PCB.

- More freedom when designing components and devices.
- Easy access and a high component density when multiple interfaces are arranged in parallel within a single plugging area
- The housing design is application-friendly because of the additional optional wire outlet direction.
- Available as closed (G) and with solder flange (LF).
- 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 and coding.

Туре	SC-SMT 3.81/04/135G 1.5	Version	Product data	Packaging
Order No.	<u>1977950000</u>	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248685530	connection, 3.81 mm, Number of poles: 4, 135°, Solder pin length (I)	: UL: 300 V / 11 A	
Qty.	50 pc(s).	1.5 mm, tinned, black, Box		
Turno	00 00 00 00 00 00 00 00 00 00 00 00 00			
Туре	SC-SMT 3.81/04/135G 3.2	Version	Product data	Packaging
Order No.	SC-SMT 3.81/04/135G 3.2 1977220000	Version PCB plug-in connector, male header, closed side, THT/THR solder	Product data IEC: 320 V / 17.5 A	Packaging Box
• •	, ,		IEC: 320 V / 17.5 A	



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Klingenbergstraße 26 D-32758 Detmold

Germany Fon: +49 5231 14-0

Fax: +49 5231 14-292083 www weidmueller.com

Mating connector (fully pluggable)

SCZ 3.81/180G



The inverted SCZ pin plug with clamping-yoke screw connection is designed for straight wire connections in 3.81-mm pitch. It can be used in two ways:

- for wire-to-wire connections together with the BCZ
- as a mating plug for the touch-safe BCL socket block on the PCB.

The SCZ is available in four different versions:

- Without flange ("G", closed)
- With standard flange ("F", with socket nut)
- With inverted flange ("FI", with screw)
- and with Weidmüller's patented release latch for a toolfree, no-strain disconnect

The SCZ provides space for labelling and can be coded.

General ordering data

Туре	SCZ 3.81/04/180G SN BK	Version	Product data	Packaging
Order No.	<u>1970030000</u>	PCB plug-in connector, male plug, 3.81 mm, Number of poles: 4,	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ²	Box
GTIN (EAN)	4032248679454	$180^{\circ},$ Clamping yoke connection, Clamping range, max. : $1.5\;mm^{2},$	UL: 300 V / 10 A / AWG 28 - AWG 1	6
Qty.	50 pc(s).	Вох		
Туре	SCZ 3.81/04/180G SN OR	Version	Product data	Packaging
Order No.	<u>1969560000</u>	PCB plug-in connector, male plug, 3.81 mm, Number of poles: 4,	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ²	Box
GTIN (EAN)	4032248679157	$180^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 1.5 \text{mm}^{2}\text{,}$	UL: 300 V / 10 A / AWG 28 - AWG 1	6
Qty.	50 pc(s).	Box		
Туре	SCZ 3.81/04/180G SN GN	Version	Product data	Packaging
Order No.	<u>1969780000</u>	PCB plug-in connector, male plug, 3.81 mm, Number of poles: 4,	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm ²	Box
GTIN (EAN)	4032248679300	180°, Clamping yoke connection, Clamping range, max. : 1.5 mm²,	UL: 300 V / 10 A / AWG 28 - AWG 1	6
Qty.	50 pc(s).	Вох		

SCDN 3.81/90G



Extra flat two-tier SCDN pin header for wave soldering.

- Two compact interfaces are used with the flat BCF 3.81 (PUSH IN) socket block.
- Available as 90° (recumbent).
- Connections on a single level, allowing access that is flush over the front board.
- Space for labelling and coding
- Packed in cardboard box.

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 and coding.

Туре	SCDN 3.81/08/90G 3.2SN	Version	Product data	Packaging
Order No.	1040820000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248769674	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Mating connector (fully pluggable)

Туре	SCDN 3.81/08/90G 3.2SN	Version	Product data	Packaging
Order No.	1040430000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248769094	connection, 3.81 mm, Number of poles: 8, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	50 pc(s).	3.2 mm, tinned, orange, Box		
Туре	SCDN 3.81/08/90G 3.2SN	Version	D 1 . 1 .	De else siles se
Type	3CDN 3.61/06/90G 3.25N	version	Product data	Packaging
Order No.	1040650000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17.5 A	Box
				0 0

SC-SMT 3.81/180G Box

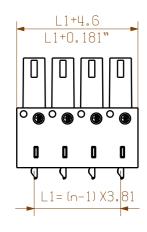


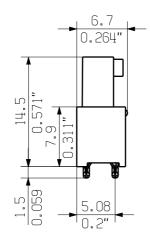
High-temperature-resistant pin header (SC-SMT 180G) in 3.81-mm pitch (0.15 inch)

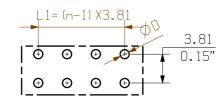
- Plugging direction is perpendicular to PCB (standing)
- Closed (G).
- Packed either in box (BX) or on anti-static roll (tape-onreel, RL)
- Pin length of either 1.5 mm or 3.2 mm

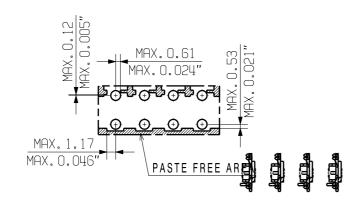
Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of standard connectors and offer space for labelling and coding.

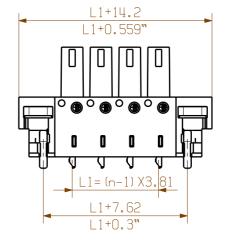
Туре	SC-SMT 3.81/04/180G 3.2	Version	Product data	Packaging
Order No.	1862950000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 17.5 A	Box
GTIN (EAN)	4032248428137	connection, 3.81 mm, Number of poles: 4, 180°, Solder pin length (I): UL: 300 V / 11 A		
Qty.	50 pc(s).	3.2 mm, tinned, black, Box		
Type	SC-SMT 3.81/04/180G 1.5	Version	Product data	Packaging
Type Order No.	SC-SMT 3.81/04/180G 1.5 1863750000	Version PCB plug-in connector, male header, closed side, THT/THR solder	Product data IEC: 320 V / 17.5 A	Packaging Box
			IEC: 320 V / 17.5 A	0 0

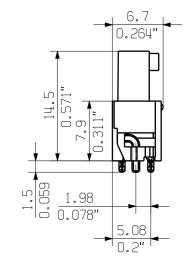












41.91

38.10

34.29

30.48

26.67

22.86

19.05

15.24

11.43

7.62

3.81

n L1 [mm]

1.650

1.500

1.350

1.200

1.050

0.900

0.750

0.600

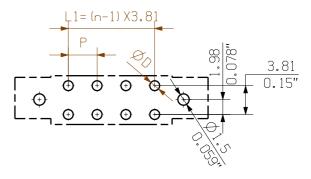
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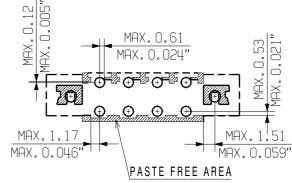
0.300

0.150

L1 [inch]

ISSUE NO





NOTE: n=NO OF POLES P=PITCH

KUNDENZEICHNUNG

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

CUSTOMER DRAWING

SCALE: 2/1

SUPERSEDES:

SUPERSEDED BY:



19.02.2008 SHI_S BCL-SMT 3.81/.../180...1.5... RESPONSIBLE XU_S LOETANSCHLUSS BUCHSENLEISTE CHECKED 29.08.2012 ZHOU N SOLDER CONNECTION SOCKET CONNECTOR APPROVED XU_S PRODUCT FILE: BCL-SMT 3.81



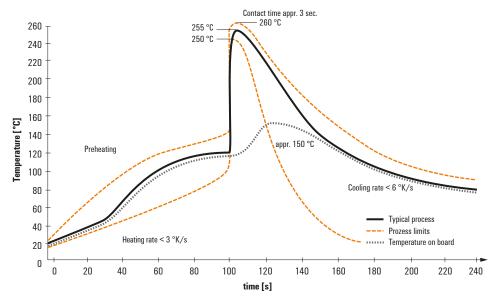
Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG

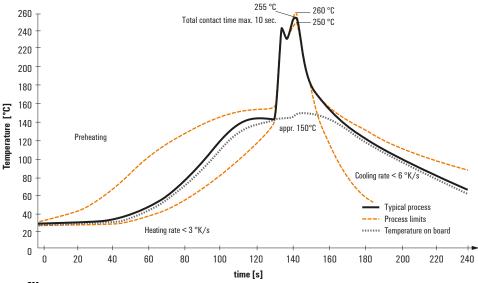
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Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

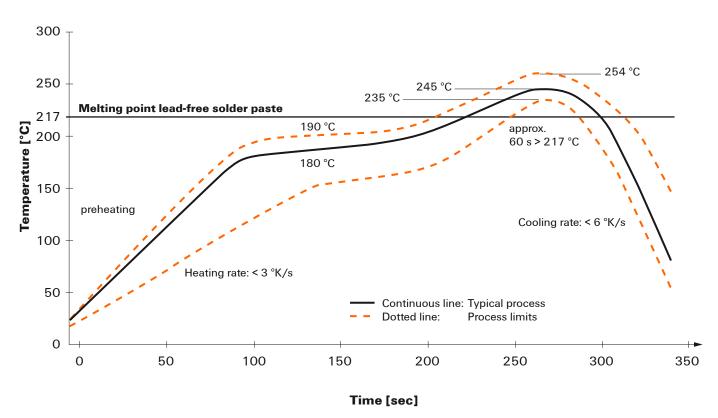


Recommended reflow soldering profile

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Klingenbergstraße 16 D-32758 Detmold Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com



Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- · Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- · Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically $\leq +3$ K/s. In parallel the solder paste is ,activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at \geq -6K/s solder is cured. Board and components cool down while avoiding cold cracks.