

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/05/180LF 1.5SN BK BX

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Similar to illustration

High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

General ordering data

Type	SL-SMT 5.08HC/05/180LF 1.5SN BK BX
Order No.	1776392001
Version	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 5.08 mm, Number of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box
GTIN (EAN)	4032248159178
Qty.	48 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Box

Creation date May 3, 2020 1:00:40 PM CEST

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/05/180LF 1.5SN BK BX**

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Technical data**Dimensions and weights**

Width	35.2 mm	Width (inches)	1.386 inch
Height	13.5 mm	Height (inches)	0.531 inch
Height of lowest version	12 mm	Depth	8.5 mm
Depth (inches)	0.335 inch	Net weight	3.4 g

System specifications

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
Number of poles	5	Number of solder pins per pole	1
Solder pin length (l)	1.5 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.5 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm	20.32 mm	L1 in inches	0.8 inch
Number of rows	1	Pin series quantity	1
Volume resistance	≤ 5mΩ	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	9 N
Pulling force/pole, max.	7 N		

Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIla
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	CuMg	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 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	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)	27.5 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	24 A
Rated current, max. number of poles (Tu=40°C)	16.5 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV		

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Technical data

Rated data acc. to CSA

Institute (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 D / CSA)	18.5 A	Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated data acc. to UL 1059

Institute (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)	18.5 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	40 mm
VPE width	70 mm	VPE height	165 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	30-21-18-10

Notes

Notes	<ul style="list-style-type: none"> • 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.
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.

Data sheet

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

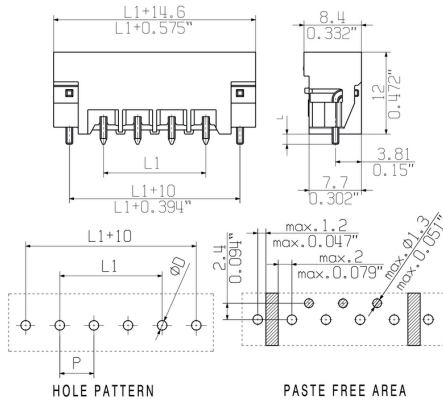
Approval/Certificate/Document of Conformity	CB Certificate CB Testreport Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB SMT EN FL DRIVES DE MB DEVICE MANUF. EN CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.CONTROLS EN FL MACHINE SAFETY EN FL HEATING 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	WSCAD
Engineering Data	STEP
White paper surface mount technology	Download Whitepaper

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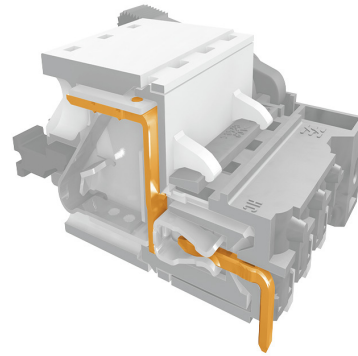
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Drawings

Dimensional drawing



Product benefits



Safe power transmission

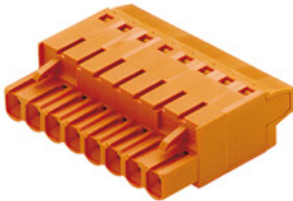
Product benefits

Proven properties



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Mating connector (conditionally pluggable)
BLT 5.08HC/180B


Female plugs with TOP screw connection system for connecting wires with straight 180° outlet direction. The female connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

Type	BLT 5.08HC/05/180B SN O ...	Version	Product data	Packaging
Order No.	1502160000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190137519	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	66 pc(s).			

BLL 5.08/180


Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

General ordering data

Type	BLL 5.08/05/180 4.5 SN ...	Version	Product data	Packaging
Order No.	1646280000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285623	connection, 5.08 mm, Number of poles: 5, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	72 pc(s).	4.5 mm, tinned, black, Box		
Type	BLL 5.08/05/180 4.5 SN ...	Version	Product data	Packaging
Order No.	1646170000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285517	connection, 5.08 mm, Number of poles: 5, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	72 pc(s).	4.5 mm, tinned, orange, Box		

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Mating connector (conditionally pluggable)
BLL 5.08/90


Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

General ordering data

Type	BLL 5.08/05/90 4.5 SN B ...	Version	Product data	Packaging
Order No.	1646060000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285401	connection, 5.08 mm, Number of poles: 5, 90°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	72 pc(s).	4.5 mm, tinned, black, Box		

BLZ 5.08/180


Female plugs with clamping-yoke screw for wire connection with straight (180°) outlet direction. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZ 5.08/05/180 SN DKG...	Version	Product data	Packaging
Order No.	1526750000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 19 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190148874	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	50 pc(s).	Box		
Type	BLZ 5.08/05/180 SN OR B ...	Version	Product data	Packaging
Order No.	1688380000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 19 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190857677	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	72 pc(s).	Box		
Type	BLZ 5.08/05/180 SN GY BX	Version	Product data	Packaging
Order No.	1526700000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	UL:	Box
GTIN (EAN)	4008190286415	180°, Clamping yoke connection, Box		
Qty.	50 pc(s).			

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Mating connector (fully pluggable)
BLZP 5.08HC/180F SN


Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Type	BLZP 5.08HC/05/180F SN ...	Version	Product data	Packaging
Order No.	1944360000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248618934	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLZP 5.08HC/05/180F SN ...	Version	Product data	Packaging
Order No.	1944120000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248617500	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

BLF 5.08HC/180LR SN


Just as reliable as the millionfold proven original and featuring innovative details:
The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.
In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	BLF 5.08HC/05/180LR SN ...	Version	Product data	Packaging
Order No.	1014410000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248722952	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLF 5.08HC/05/180LR SN ...	Version	Product data	Packaging
Order No.	1014150000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248723188	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

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Mating connector (fully pluggable)**BLF 5.08HC/270LR SN**

Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	BLF 5.08HC/05/270LR SN ...	Version	Product data	Packaging
Order No.	1983110000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248687206	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	
Type	BLF 5.08HC/05/270LR SN ...	Version	Product data	Packaging
Order No.	1982340000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686438	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	

BLZP 5.08HC/270F SN

Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Type	BLZP 5.08HC/05/270F SN ...	Version	Product data	Packaging
Order No.	1950580000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628711	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLZP 5.08HC/05/270F SN ...	Version	Product data	Packaging
Order No.	1950340000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628469	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

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SL-SMT 5.08HC/05/180LF 1.5SN BK BX**

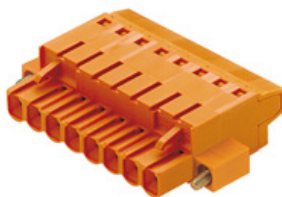
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Mating connector (fully pluggable)
BLL 5.08/90FI


Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

General ordering data

Type	BLL 5.08/05/90FI 3.2SN ...	Version	Product data	Packaging
Order No.	1843780000	PCB plug-in connector, female header, Inverted flange, THT solder connection, 5.08 mm, Number of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 23 A UL: 300 V / 15 A	Box
GTIN (EAN)	4032248355532			
Qty.	48 pc(s).			

BLT 5.08HC/180F


Female plugs with TOP screw connection system for connecting wires with straight outlet direction and screw flange. The female connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

Type	BLT 5.08HC/05/180F SN B ...	Version	Product data	Packaging
Order No.	1844250000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box	IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14	Box
GTIN (EAN)	4032248356188			
Qty.	48 pc(s).			
Type	BLT 5.08HC/05/180F SN O ...	Version	Product data	Packaging
Order No.	1844020000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box	IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14	Box
GTIN (EAN)	4032248355945			
Qty.	48 pc(s).			

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Mating connector (fully pluggable)**BLDF 5.08/180F SN**

The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5A current-carrying capacity. The large clamping capacity (up to 2.5mm² wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop. Four flange variations, including the patented release latch, allow for user-friendly unplugging designs.

General ordering data

Type	BLDF 5.08/05/180F SN OR ...	Version	Product data	Packaging
Order No.	1065080000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817856	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	32 pc(s).	Box	26	
Type	BLDF 5.08/05/180F SN BK ...	Version	Product data	Packaging
Order No.	1000970000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817337	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	32 pc(s).	Box	26	

BLF 5.08HC/90LR SN

Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	BLF 5.08HC/05/90LR SN B ...	Version	Product data	Packaging
Order No.	1000440001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690404	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	
Type	BLF 5.08HC/05/90LR SN O ...	Version	Product data	Packaging
Order No.	1002310000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694471	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	

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- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	BLF 5.08HC/05/180F SN B ...	Version	Product data	Packaging
Order No.	1012670000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248720323	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	48 pc(s).	Box	12	
Type	BLF 5.08HC/05/180F SN O ...	Version	Product data	Packaging
Order No.	1013120000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248720873	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	48 pc(s).	Box	12	

BLT 5.08HC/180LR


Female plugs with TOP screw connection system for connecting wires with straight wire outlet and release latch mechanism. The female connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

Type	BLT 5.08HC/05/180LR SN ...	Version	Product data	Packaging
Order No.	1894160000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248508402	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	48 pc(s).			
Type	BLT 5.08HC/05/180LR SN ...	Version	Product data	Packaging
Order No.	1890250000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248498734	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	48 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/05/180LF 1.5SN BK BX**

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

Mating connector (fully pluggable)
BLDF 5.08/180LR SN


The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5 A current-carrying capacity. The large clamping capacity (up to 2.5mm² wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop. Four flange variations, including the patented release latch, so you can design the interlock based on the requirements of the user.

General ordering data

Type	BLDF 5.08/05/180LR SN B ...	Version	Product data	Packaging
Order No.	1001040000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817467	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	32 pc(s).	Box	26	
Type	BLDF 5.08/05/180LR SN O ...	Version	Product data	Packaging
Order No.	1065160000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817870	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	32 pc(s).	Box	26	

BLZP 5.08HC/90LR


Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Type	BLZP 5.08HC/05/90LR SN ...	Version	Product data	Packaging
Order No.	1087280000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248854462	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLZP 5.08HC/05/90LR SN ...	Version	Product data	Packaging
Order No.	1087050000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248853724	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
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Mating connector (fully pluggable)
BLZP 5.08HC/270LR SN


Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Type	BLZP 5.08HC/05/270LR SN ...	Version	Product data	Packaging
Order No.	1947560000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248623853	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLZP 5.08HC/05/270LR SN ...	Version	Product data	Packaging
Order No.	1947790000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624188	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

BLZP 5.08HC/90F SN


Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Type	BLZP 5.08HC/05/90F SN O ...	Version	Product data	Packaging
Order No.	1949830000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248627752	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLZP 5.08HC/05/90F SN B ...	Version	Product data	Packaging
Order No.	1950070000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628001	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
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Mating connector (fully pluggable)**BLZP 5.08HC/180LR SN**

Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

General ordering data

Type	BLZP 5.08HC/05/180LR SN ...	Version	Product data	Packaging
Order No.	1944860000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248619467	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLZP 5.08HC/05/180LR SN ...	Version	Product data	Packaging
Order No.	1945090000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248620234	180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

BLF 5.08HC/270F SN

Just as reliable as the millionfold proven original and featuring innovative details:
The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.
In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	BLF 5.08HC/05/270F SN B ...	Version	Product data	Packaging
Order No.	1982150000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686247	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			
Type	BLF 5.08HC/05/270F SN O ...	Version	Product data	Packaging
Order No.	1982920000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248687015	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	48 pc(s).			

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/05/180LF 1.5SN BK BX**

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Mating connector (fully pluggable)
BLF 5.08HC/90F SN


Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

Type	BLF 5.08HC/05/90F SN OR ...	Version	Product data	Packaging
Order No.	1002120000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694075	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	
Type	BLF 5.08HC/05/90F SN BK ...	Version	Product data	Packaging
Order No.	1000250001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 5,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690213	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	48 pc(s).	Box	12	

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/05/180LF 1.5SN BK BX

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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	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

Additional accessories



No task is too small when creating the perfect solution. br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

General ordering data

Type	SL AT SW	Version	Product data	Packaging
Order No.	1770240000	PCB plug-in connector, Accessories, Spacer, black, Number of poles: 1		Box
GTIN (EAN)	4032248117710			
Qty.	100 pc(s).			

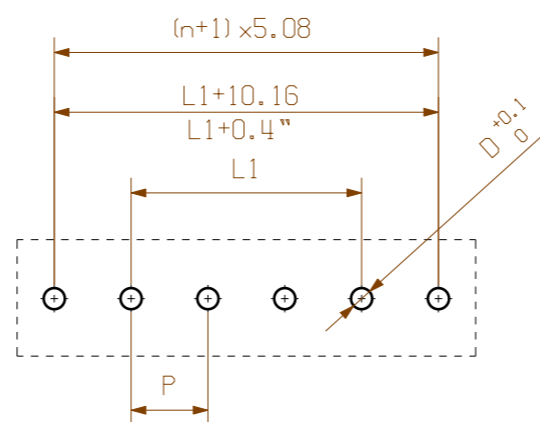
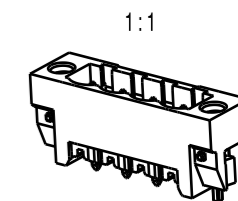
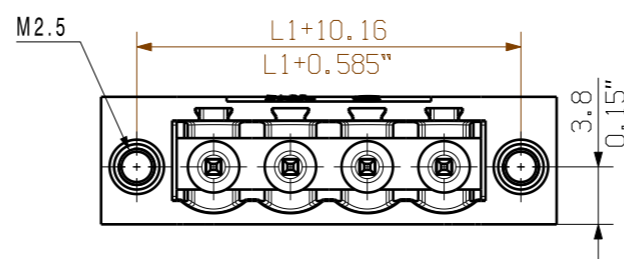
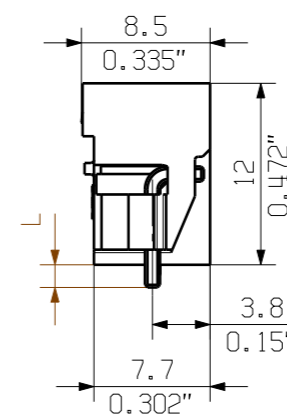
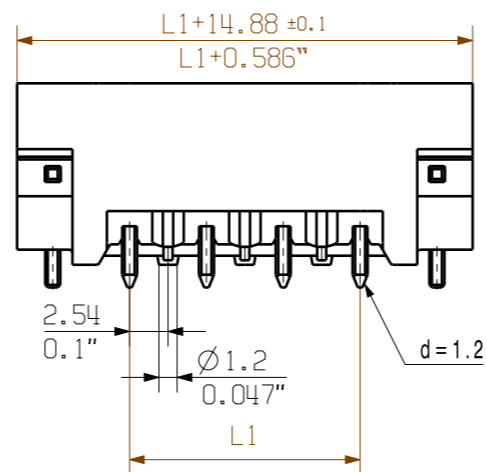
Data sheet

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/05/180LF 1.5SN BK BX**

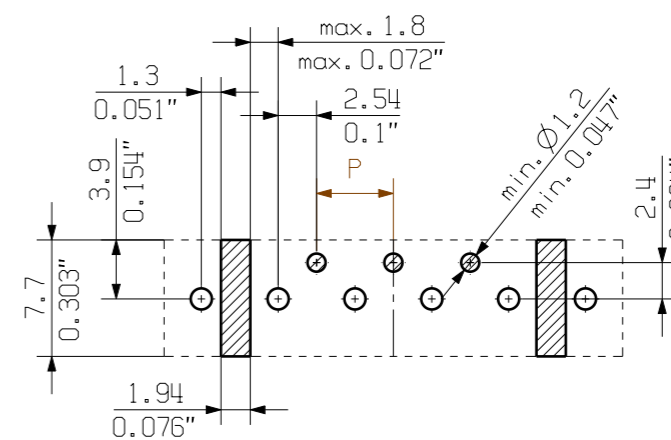
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Accessories

Type	SL AT OR	Version	Product data	Packaging
Order No.	1598300000	PCB plug-in connector, Accessories, Spacer, orange, Number of poles:		Box
GTIN (EAN)	4008190189266	1		
Qty.	100 pc(s).			



HOLE PATTERN



PASTE-FREE AREA

24	116,84	4,600
23	111,76	4,400
22	106,68	4,200
21	101,60	4,000
20	96,52	3,800
19	91,44	3,600
18	86,36	3,400
17	81,28	3,200
16	76,20	3,000
15	71,12	2,800
14	66,04	2,600
13	60,96	2,400
12	55,88	2,200
11	50,80	2,000
10	45,72	1,800
9	40,64	1,600
8	35,56	1,400
7	30,48	1,200
6	25,40	1,000
5	20,32	0,800
4	15,24	0,600
3	10,16	0,400
2	5,08	0,200
n	L1 [mm]	L1 [Inch]

D = 1.5/0.059" (REFLOW SOLDERING)
RECOMMENDATION FOR AUTOMATIC ASSEMBLY

n = POLZAH/ NO OF POLES

P = RASTER/PITCH

SHOWN: SL-SMT 5.08HC/04/180 LF

1,5	0,0
	-0,3
3,2	0,1
	-0,3
4,5	0,1
	-0,3
STIFTLAENGE L	TOLERANZ

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

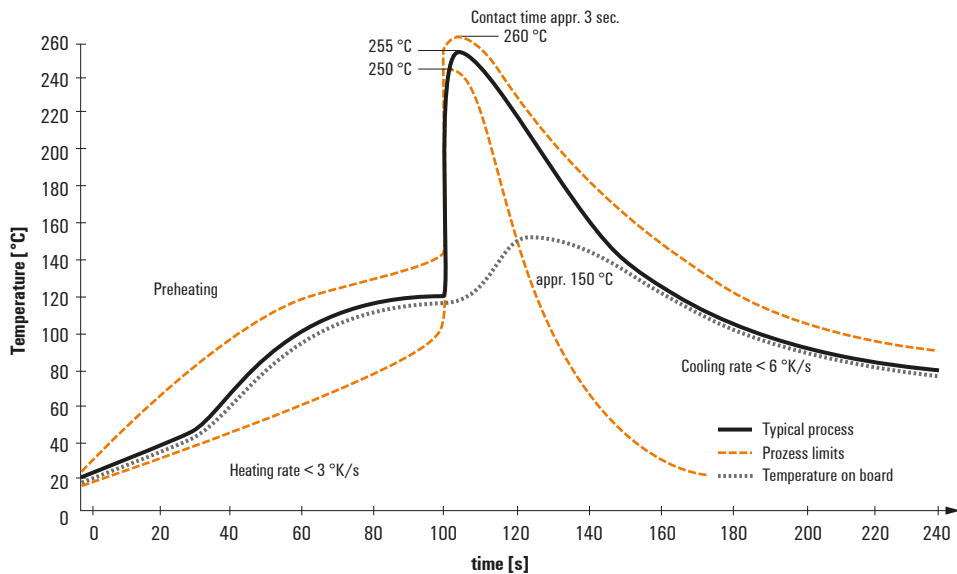
Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

	DIN ISO 2768-m	106339/4	01		Cat.no.:
	30.07.18 HERTEL_S	Modification			C 34148
	Drawn	Date	Name	SL-SMT 5.08HC/.../180... STIFTLAENGE MALE HEADER	Drawing no.
	Responsible				Sheet 03 of 04 sheets
	Checked	01.08.2018	KOCH_JG		
Supersedes: .	Approved		LANG_T	Product file: SL-SMT 5.08HC	7280

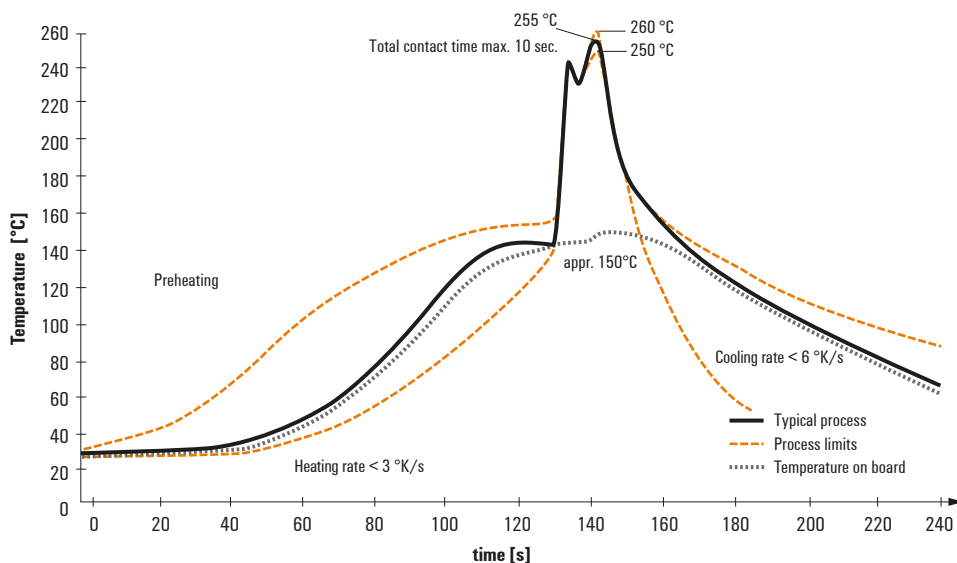
Recommended wave soldering profiles

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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.

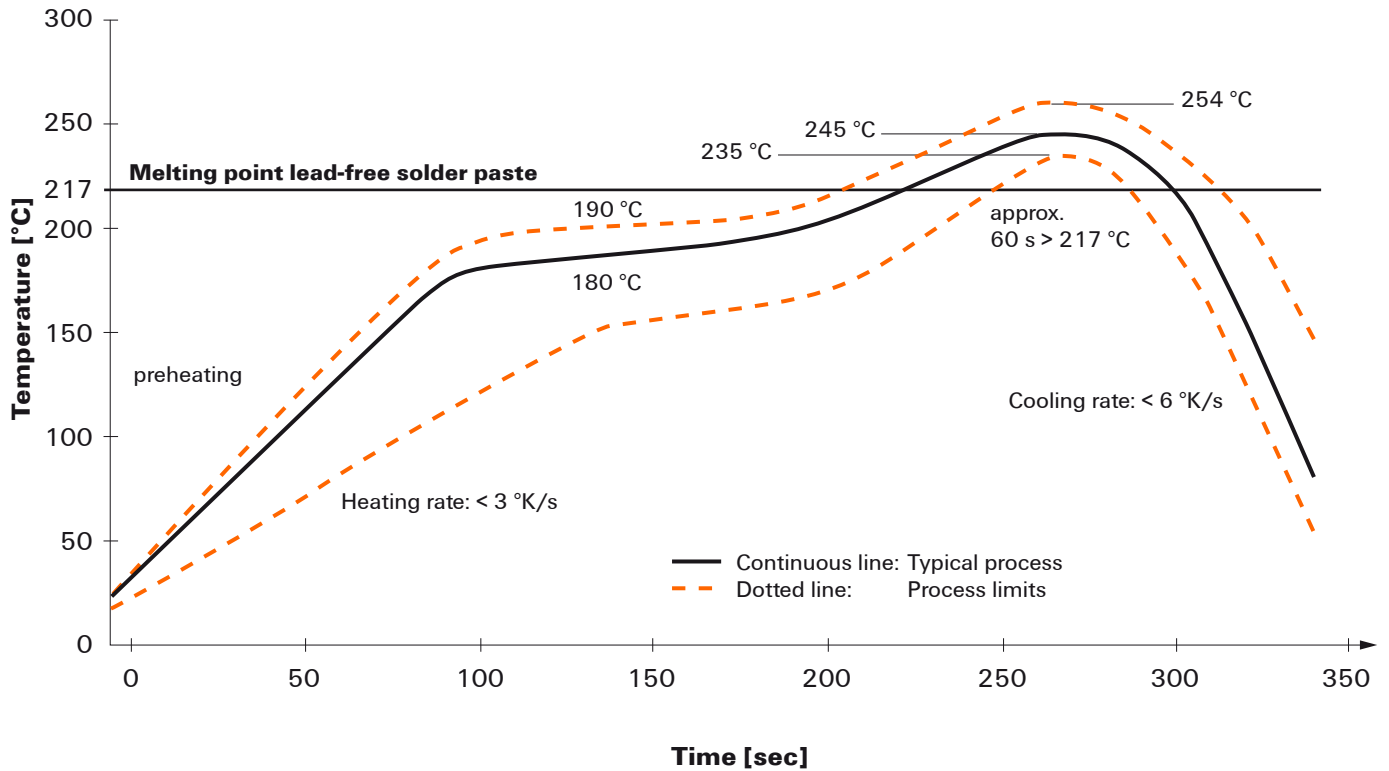
When choosing a suitable profile for your application, the following factors also need to be considered:

- 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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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 $\leq +3\text{K/s}$. 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 $\geq -6\text{K/s}$ solder is cured. Board and components cool down while avoiding cold cracks.