

**OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/03/180LF 1.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
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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/03/180LF 1.5SN BK BX
Order No.	1776372001
Version	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box
GTIN (EAN)	4032248159154
Qty.	72 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Box

Creation date May 3, 2020 12:59:14 PM CEST

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Technical data

Dimensions and weights

Width	25.04 mm	Width (inches)	0.986 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	2.45 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	3	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	10.16 mm	L1 in inches	0.4 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	IIIa
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	45 mm
VPE width	110 mm	VPE height	180 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.

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

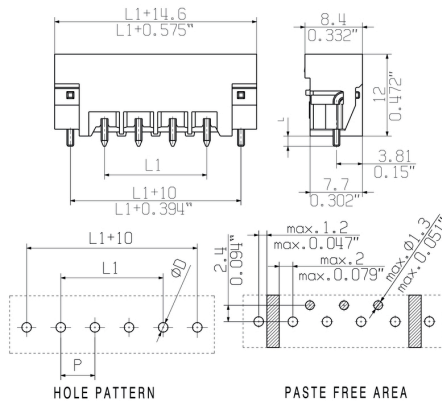
Approval/Certificate/Document of Conformity	CB Certificate CB Testreport Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB SMT EN FL DRIVES DE MB DEVICE MANUF. EN CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING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

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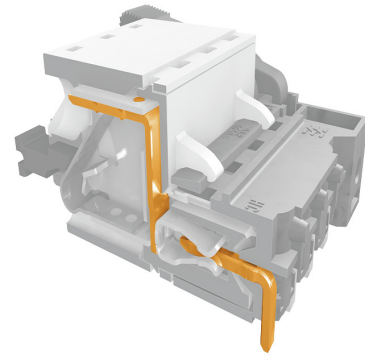
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Drawings

Dimensional drawing



Product benefits



Safe power transmission

Product benefits Proven properties

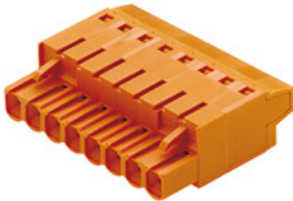


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Mating connector (conditionally pluggable)

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/03/180B SN O ...	Version	Product data	Packaging
Order No.	1501960000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190186586	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	102 pc(s).			
Type	BLT 5.08HC/03/180B SN B ...	Version	Product data	Packaging
Order No.	1501910000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190863661	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	102 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 5.08/03/180 4.5SN O ...	Version	Product data	Packaging
Order No.	1646150000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285494	connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	100 pc(s).	4.5 mm, tinned, orange, Box		
Type	BLL 5.08/03/180 4.5 SN ...	Version	Product data	Packaging
Order No.	1646260000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285609	connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	120 pc(s).	4.5 mm, tinned, black, 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 5.08/03/90 4.5 SN O ...	Version	Product data	Packaging
Order No.	1645930000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285272	connection, 5.08 mm, Number of poles: 3, 90°, Solder pin length (l):	UL: 300 V / 15 A	
Qty.	120 pc(s).	4.5 mm, tinned, orange, 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 5.08/03/180 SN OR B ...	Version	Product data	Packaging
Order No.	1594250000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4008190011918	180°, Clamping yoke connection, Clamping range, max.: 3.31 mm²,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	120 pc(s).	Box		
Type	BLZ 5.08/03/180 SN GY BX	Version	Product data	Packaging
Order No.	1526500000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4008190267124	180°, Clamping yoke connection, Clamping range, max.: 3.31 mm²,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	100 pc(s).	Box		
Type	BLZ 5.08/03/180 SN DKG ...	Version	Product data	Packaging
Order No.	1526550000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4008190143442	180°, Clamping yoke connection, Clamping range, max.: 3.31 mm²,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	100 pc(s).	Box		
Type	BLZ 5.08/03/180 SN BL BX	Version	Product data	Packaging
Order No.	1526580000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4008190286422	180°, Clamping yoke connection, Clamping range, max.: 3.31 mm²,	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	100 pc(s).	Box		

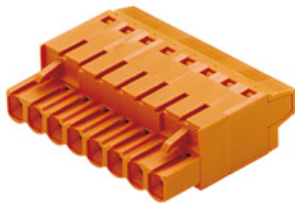
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Mating connector (conditionally pluggable)

BLT 5.08HC



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/03/180 SN BL ...	Version	Product data	Packaging
Order No.	1499680000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248015450	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	120 pc(s).			

BLZF 5.08/180



Female plugs with tension-clamp wire connection system, straight 180° outlet direction. The female plugs provide space for labelling and can be coded.

General ordering data

Type	BLZF 5.08/03/180 SN GY ...	Version	Product data	Packaging
Order No.	1708080000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 17 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4008190317515	180°, Tension-clamp connection, Clamping range, max. : 3.31 mm ² , Box	UL: 300 V / 15 A / AWG 26 - AWG 12	
Qty.	120 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/03/180F SN ...	Version	Product data	Packaging
Order No.	1944100000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248617487	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLZP 5.08HC/03/180F SN ...	Version	Product data	Packaging
Order No.	1944340000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248618910	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 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/03/180LR SN ...	Version	Product data	Packaging
Order No.	1014380000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248722976	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², UL: 300 V / 18.5 A / AWG 26 - AWG	12	
Qty.	72 pc(s).	Box		
Type	BLF 5.08HC/03/180LR SN ...	Version	Product data	Packaging
Order No.	1014130000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248723201	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², UL: 300 V / 18.5 A / AWG 26 - AWG	12	
Qty.	72 pc(s).	Box		

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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/03/270LR SN ...	Version	Product data	Packaging
Order No.	1982320000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686414	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	72 pc(s).	Box	12	
Type	BLF 5.08HC/03/270LR SN ...	Version	Product data	Packaging
Order No.	1983090000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248687183	270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	72 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/03/270F SN ...	Version	Product data	Packaging
Order No.	1950320000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628438	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLZP 5.08HC/03/270F SN ...	Version	Product data	Packaging
Order No.	1950560000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248628698	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			

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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 5.08/03/90FI 3.2SN ...	Version	Product data	Packaging
Order No.	1843760000	PCB plug-in connector, female header, Inverted flange, THT solder connection, 5.08 mm, Number of poles: 3, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 400 V / 23 A UL: 300 V / 15 A	Box
GTIN (EAN)	4032248355518			
Qty.	72 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/03/180F SN O ...	Version	Product data	Packaging
Order No.	1844000000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3, 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)	4032248355921			
Qty.	72 pc(s).			
Type	BLT 5.08HC/03/180F SN B ...	Version	Product data	Packaging
Order No.	1844230000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3, 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)	4032248356164			
Qty.	72 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 5.08/03/180F SN OR ...	Version	Product data	Packaging
Order No.	1012060000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248818037	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	48 pc(s).	Box	26	
Type	BLDF 5.08/03/180F SN BK ...	Version	Product data	Packaging
Order No.	1000950000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817085	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	48 pc(s).	Box	26	

BLF 5.08HC/90LR SN



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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/03/90LR SN B ...	Version	Product data	Packaging
Order No.	1000420001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690381	90°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	72 pc(s).	Box	12	
Type	BLF 5.08HC/03/90LR SN O ...	Version	Product data	Packaging
Order No.	1002290000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694457	90°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	72 pc(s).	Box	12	

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/03/180LF 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)

BLF 5.08HC/180F 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/03/180F SN O ...	Version	Product data	Packaging
Order No.	1013090000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248853397	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	72 pc(s).	Box	12	
Type	BLF 5.08HC/03/180F SN B ...	Version	Product data	Packaging
Order No.	1012650000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248720309	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 26 - AWG		
Qty.	72 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/03/180LR SN ...	Version	Product data	Packaging
Order No.	1890230000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248498710	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	72 pc(s).			
Type	BLT 5.08HC/03/180LR SN ...	Version	Product data	Packaging
Order No.	1894140000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248508389	180°, TOP connection, Clamping range, max. : 2.5 mm ² , Box	UL: 300 V / 17 A / AWG 26 - AWG 14	
Qty.	72 pc(s).			

OMNIMATE Signal - series BL/SL 5.08

SL-SMT 5.08HC/03/180LF 1.5SN BK BX

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 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 5.08/03/180LR SN B ...	Version	Product data	Packaging
Order No.	1001020000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248817641	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	48 pc(s).	Box	26	
Type	BLDF 5.08/03/180LR SN O ...	Version	Product data	Packaging
Order No.	1065140000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248818082	180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , UL: 300 V / 18.5 A / AWG 12 - AWG		
Qty.	48 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/03/90LR SN ...	Version	Product data	Packaging
Order No.	1087260000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248853939	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLZP 5.08HC/03/90LR SN ...	Version	Product data	Packaging
Order No.	1087030000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248853441	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/03/180LF 1.5SN BK BX

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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/03/270LR SN ...	Version	Product data	Packaging
Order No.	1947770000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624164	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLZP 5.08HC/03/270LR SN ...	Version	Product data	Packaging
Order No.	1947540000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248623839	270°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 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/03/90F SN O ...	Version	Product data	Packaging
Order No.	1949810000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248627738	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLZP 5.08HC/03/90F SN B ...	Version	Product data	Packaging
Order No.	1950050000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248627981	90°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/03/180LF 1.5SN BK BX

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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/03/180LR SN ...	Version	Product data	Packaging
Order No.	1944840000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248619443	180°, Clamping yoke connection, Clamping range, max.: 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLZP 5.08HC/03/180LR SN ...	Version	Product data	Packaging
Order No.	1945070000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm²	Box
GTIN (EAN)	4032248620210	180°, Clamping yoke connection, Clamping range, max.: 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	
Qty.	72 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/03/270F SN B ...	Version	Product data	Packaging
Order No.	1982130000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248686223	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm², Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			
Type	BLF 5.08HC/03/270F SN O ...	Version	Product data	Packaging
Order No.	1982900000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm²	Box
GTIN (EAN)	4032248686995	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm², Box	UL: 300 V / 18.5 A / AWG 26 - AWG 12	
Qty.	72 pc(s).			

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/03/180LF 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/03/90F SN OR ...	Version	Product data	Packaging
Order No.	1002100000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248694051	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	72 pc(s).	Box	12	
Type	BLF 5.08HC/03/90F SN BK ...	Version	Product data	Packaging
Order No.	1000230001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690190	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	72 pc(s).	Box	12	

OMNIMATE Signal - series BL/SL 5.08 SL-SMT 5.08HC/03/180LF 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.

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).			

OMNIMATE Signal - series BL/SL 5.08
SL-SMT 5.08HC/03/180LF 1.5SN BK BX

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Accessories

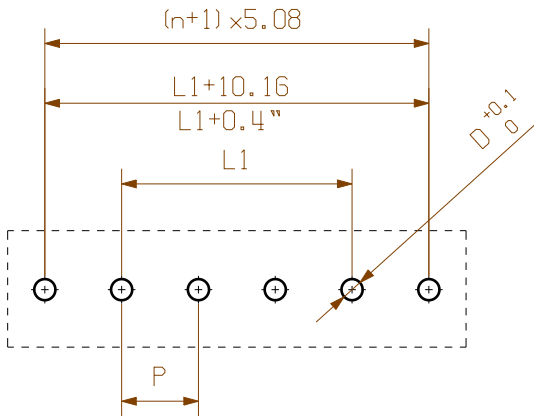
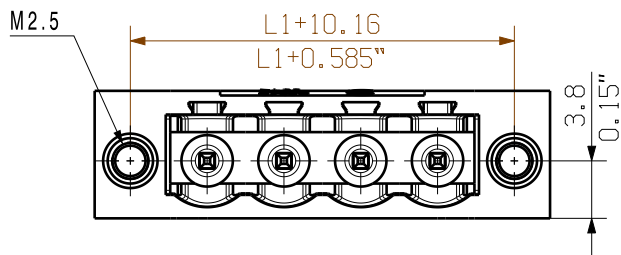
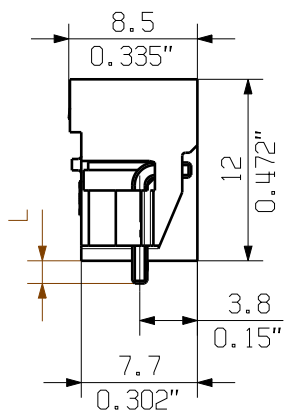
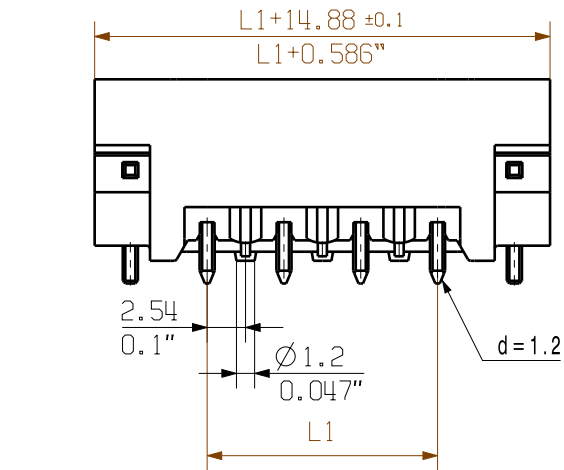
Type	SL AT OR	Version	Product data	Packaging
Order No.	1598300000	PCB plug-in connector, Accessories, Spacer, orange, Number of poles:		Box
GTIN (EAN)	4008190189266	1		
Qty.	100 pc(s).			

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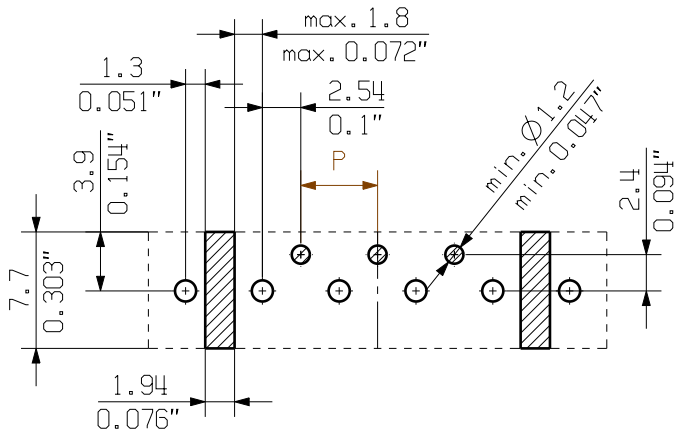
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Dimensions without tolerances are no check dimensions

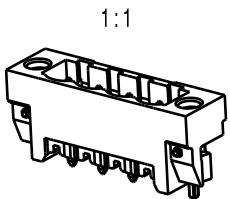
The English version is binding



HOLE PATTERN



PASTE-FREE AREA



1:1

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	24	116,84	4,600
	-0,3	23	111,76	4,400
3,2	0,1	22	106,68	4,200
	-0,3	21	101,60	4,000
4,5	0,1	20	96,52	3,800
	-0,3	19	91,44	3,600
STIFTLAENGE L		18	86,36	3,400
TOLERANZ		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]

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

30.07.18 HERTEL_S

01

Modification

Date

Name

Drawn

30.11.2007

HELIS_MA

Responsible

HERTEL_S

Checked

01.08.2018

KOCH_JG

Supersedes:

LANG_T

Weidmüller

Cat.no.: .

C 34148

Issue no. 23

Drawing no.

Sheet 03 of 04 sheets

SL-SMT 5.08HC/./180...

STIFTELEISTE

MALE HEADER

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.

We reserve the right to make technical changes.

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.