

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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Similar to illustration

Pin headers in glass-fibre-reinforced plastic with straight wire outlet; optimised for wave soldering. The flange variant (F) can be screwed onto the respective counter piece or the circuit board. There is no need for an extra screw to connect the circuit board when the solder flange (LF) version is used. This also protects the solder points from mechanical strain. All pin headers can be manually coded or ordered pre-coded. HC = High Current.

General ordering data

Туре	SL 5.08HC/13/180G 3.2SN BK BX
Order No.	<u>1149000000</u>
Version	PCB plug-in connector, male header, closed side, THT solder connection, 5.08 mm, Number of poles: 13, 180°, Solder pin length (I): 3.2 mm, tinned, black, Box
GTIN (EAN)	4032248935543
Qty.	50 pc(s).
Product data	IEC: 400 V / 24 A UL: 300 V / 18.5 A
Packaging	Вох

Creation date May 2, 2020 3:40:47 AM CEST



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Technical data

Dimensions and weights

Width	69.24 mm	Width (inches)	2.726 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Depth	8.5 mm
Depth (inches)	0.335 inch	Net weight	4.004 g

System specifications

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
Number of poles	13	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin length tolerance	+0.1 / -0.3 mm
Tolerance of solder pin position	± 0.15 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder pin dimensions = d tolerance	0 / -0,03 mm	Solder eyelet hole diameter (D)	1.3 mm
Solder eyelet hole diameter tolerance (D)+ 0,1 mm	L1 in mm	60.96 mm
L1 in inches	2.4 inch	Number of rows	1
Pin series quantity	1	Volume resistance	≤ 5mΩ
Can be coded	Yes	Plugging cycles	25
Plugging force/pole, max.	10 N	Pulling force/pole, max.	7.5 N

Material data

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 550	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	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 ℃	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.	-25 °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 $(Tu=20^{\circ}C)$	24 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	21 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		

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA) 300 V
Rated current (Use group B / CSA)	18.5 A	Rated current (Use group D / CSA) 18.5 A



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Technical data

Rated data acc. to UL 1059

Institute (cURus)		Certificate No. (cURus)	
	C THE US		E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	
Rated current (Use group B / UL 1059)		Rated current (Use group D / UL 1059)	
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
	_		
Packaging	Box	VPE length	0
VPE width	0	VPE height	0
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	001033 0.1	27 44 04 02
Notes			
Notes	Additional colours on request		
	Gold-plated contact surfaces of	on request	
	Rated current related to rated	cross-section & min. No. of poles.	
	• P on drawing = pitch		
		omponent itself. Clearance and creepage distandith the relevant application standards.	ces to other components are to
IPC conformity	standards and norms and compl	veloped, manufactured and delivered according y with the assured properties in the data sheet Class 2". Further claims on the products can be	resp. fulfill decorative properties
Approvals			
Approvals		LEMA	
		INEUR]	
ROHS	Conform		



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Technical data

Downloads

Approval/Certificate/Document of	CB Certificate
Conformity	CB Testreport
Comorning	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN
	MB DEVICE MANUF. EN
	FL DRIVES DE
	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	<u>STEP</u>
Product Change Notification	EN - Change of packaging
-	DE - Change of packaging



Weidmüller Interface GmbH & Co. KG

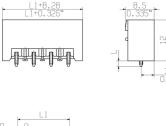
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Drawings

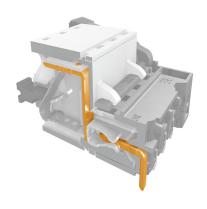
Dimensional drawing





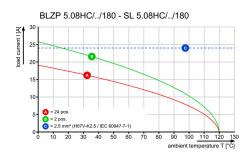
Product benefits

Graph

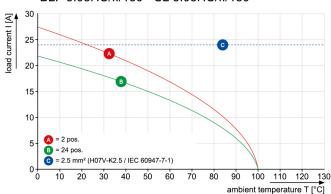


Safe power transmission
Proven properties

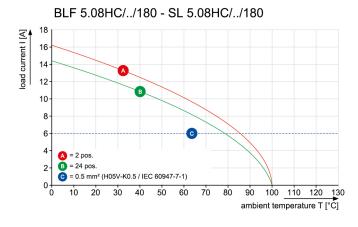
Graph



BLF 5.08HC/../180 - SL 5.08HC/../180



Graph





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Mating connector (fully pluggable)

BLZP 5.08HC/225 SN



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The 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

Туре	BLZP 5.08HC/13/225 SN B	Version	Product data	Packaging
Order No.	<u>1946670000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248622443	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	24 pc(s).			
_				
Туре	BLZP 5.08HC/13/225 SN O	Version	Product data	Packaging
Order No.	BLZP 5.08HC/13/225 SN 0 1946360000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	Product data IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Packaging Box
• •			IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box

BLZP 5.08HC/270 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.

Туре	BLZP 5.08HC/13/270 SN 0	Version	Product data	Packaging
Order No.	<u>1948900000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248626359	$270^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 4~\text{mm}^2\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	24 pc(s).			
Type	BLZP 5.08HC/13/270 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/13/270 SN B 1949130000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm ²	Packaging Box
• •			IEC: 400 V / 23 A / 0.2 - 4 mm ²	Вох



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Mating connector (fully pluggable)

BLZP 5.08HC/180 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. The 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

Туре	BLZP 5.08HC/13/180 SN O	Version	Product data	Packaging
Order No.	1943690000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248617708	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	24 pc(s).			
•	1 1 7			
Туре	BLZP 5.08HC/13/180 SN B	Version	Product data	Packaging
	- ' ' '	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,		Packaging Box
Туре	BLZP 5.08HC/13/180 SN B		IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box

BLF 5.08HC/180 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

Туре	BLF 5.08HC/13/180 SN BK	Version	Product data	Packaging
Order No.	<u>1013550000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248721696	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² ,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	
Туре	BLF 5.08HC/13/180 SN OR	Version	Product data	Packaging
Order No.	<u>1013810000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
Order No. GTIN (EAN)	1013810000 4032248721917	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13, 180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm²,	, ,	



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Mating connector (fully pluggable)

BLZP 5.08HC/90 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

Туре	BLZP 5.08HC/13/90 SN BK	Version	Product data	Packaging
Order No.	<u>1948350000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 23 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248624874	90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 1:	2
Qty.	24 pc(s).			
т		· ·		
Type	BLZP 5.08HC/13/90 SN OR	Version	Product data	Packaging
Order No.	BLZP 5.08HC/13/90 SN OR 1948120000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm ²	Packaging Box
• •				Вох

BLC 5.08R



Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

Туре	BLC 5.08/13/180R BK BX	Version	Product data	Packaging
Order No.	<u>1712070000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 21 A	Box
GTIN (EAN)	4008190935085	180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 1	4
Qty.	50 pc(s).			
_				
Type	BLC 5.08/13/180R OR BX	Version	Product data	Packaging
Type Order No.	BLC 5.08/13/180R OR BX 1610600000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	Product data IEC: 400 V / 21 A	Packaging Box
• •	, ,			Вох



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Mating connector (fully pluggable)

BLF 5.08HC/90 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

Туре	BLF 5.08HC/13/90 SN BK	Version	Product data	Packaging
Order No.	1000140001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248690091	90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	
Туре	BLF 5.08HC/13/90 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/13/90 SN OR 1001640000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Packaging Box
	, ,		IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box

BLF 5.08HC/270 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

Туре	BLF 5.08HC/13/270 SN OR	Version	Product data	Packaging
Order No.	<u>1982810000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248686902	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ² ,	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Вох	12	

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Mating connector (fully pluggable)

Туре	BLF 5.08HC/13/270 SN BK	Version	Product data	Packaging
Order No.	1982040000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 24 A / 0.2 - 2.5 mm ²	Box
GTIN (EAN)	4032248685738	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm ²	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	24 pc(s).	Box	12	

BLZP 5.08HC/225B SN



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The 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

Туре	BLZP 5.08HC/13/225B SN	Version	Product data	Packaging
Order No.	<u>1945860000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box
GTIN (EAN)	4032248621385	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	24 pc(s).			
Туре	BLZP 5.08HC/13/225B SN	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/13/225B SN 1946090000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,		Packaging Box
			IEC: 400 V / 17.5 A / 0.2 - 4 mm ²	Box

BLL 5.08/180



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

Туре	BLL 5.08/13/180 3.2 SN	Version	Product data	Packaging
Order No.	<u>1648900000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190293383	connection, 5.08 mm, Number of poles: 13, 180°, Solder pin length	UL: 300 V / 15 A	
Qty.	24 pc(s).	(I): 3.2 mm, tinned, orange, Box		



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Mating connector (fully pluggable)

BLL 5.08/90



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

General ordering data

Туре	BLL 5.08/13/90 3.2 SN O	Version	Product data	Packaging
Order No.	<u>1648420000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190292898	connection, 5.08 mm, Number of poles: 13, 90°, Solder pin length (I):	UL: 300 V / 15 A	
Qty.	24 pc(s).	3.2 mm, tinned, orange, Box		

BLC 5.08BR



Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

Туре	BLC 5.08/13/180BR BK BX	Version	Product data	Packaging
Order No.	<u>1712220000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	IEC: 400 V / 21 A	Box
GTIN (EAN)	4008190935238	180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 1	4
Qty.	50 pc(s).			
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Туре	BLC 5.08/13/180BR OR BX	Version	Product data	Packaging
Type Order No.	BLC 5.08/13/180BR OR BX 1649480000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 13,	Product data IEC: 400 V / 21 A	Packaging Box
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Mating connector (fully pluggable)

BLL 5.08/180B



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

Туре	BLL 5.08/13/180B 3.2SN	Version	Product data	Packaging
Order No.	1682840000	PCB plug-in connector, female header, Dovetails for fixing blocks, THT	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190474607	solder connection, 5.08 mm, Number of poles: 13, 180°, Solder pin	UL: 300 V / 15 A	
Qty.	24 pc(s).	length (I): 3.2 mm, tinned, orange, Box		



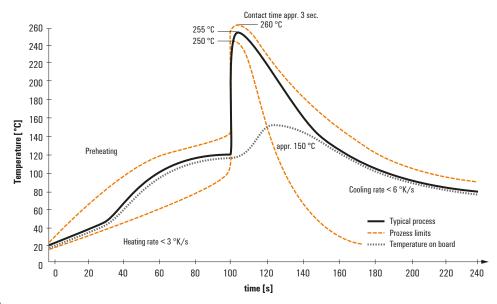
Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG

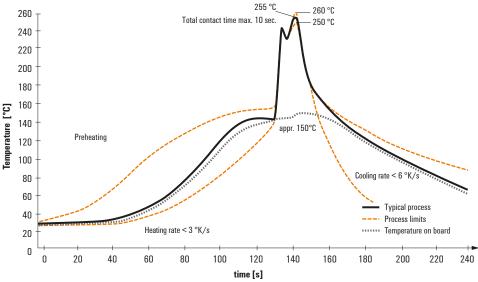
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Single Wave:



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.