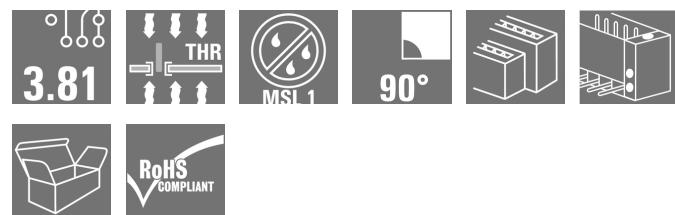


**OMNIMATE Signal - series BC/SC 3.81
SCDV-THR 3.81/08/90F 1.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergsstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
www.weidmueller.com

Product image

Similar to illustration

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

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

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

General ordering data

Delivery status	Discontinued
Available until	2016-04-08
Type	SCDV-THR 3.81/08/90F 1.5SN BK BX
Order No.	1034330000
Version	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.81 mm, No. of poles: 8, 90°, Solder pin length (l): 1.5 mm, tinned, Black, Box
GTIN (EAN)	4032248763184
Qty.	50 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

OMNIMATE Signal - series BC/SC 3.81
SCDV-THR 3.81/08/90F 1.5SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergsstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
www.weidmueller.com

Technical data
Dimensions and weights

Width	25.63 mm	Width (inches)	1.009 inch
Height	24.2 mm	Height (inches)	0.953 inch
Height of lowest version	22.7 mm	Depth	21.9 mm
Depth (inches)	0.862 inch	Net weight	8.01 g

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

System specifications

Product family	OMNIMATE Signal - series BC/SC 3.81	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	3.81 mm
Pitch in inches (P)	0.15 inch	Outgoing elbow	90°
No. of poles	8	Number of solder pins per pole	1
Solder pin length (l)	1.5 mm	Solder pin length tolerance	+0,02 / -0,02 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.0 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		Outside diameter of solder pad	2.1 mm
Template aperture diameter	1.9 mm	L1 in mm	11.43 mm
L1 in inches	0.45 inch	Number of rows	2
Pin series quantity	2	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Volume resistance	6.00 mΩ
Can be coded	Yes	Plugging cycles	25

Material data

Insulating material	LCP GF	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
CTI	≥ 175	Insulation resistance	≥ 10 ⁸ Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	17.5 A
Rated current, min. no. of poles (Tu=40°C)	17 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 76 A

Data sheet**OMNIMATE Signal - series BC/SC 3.81
SCDV-THR 3.81/08/90F 1.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergsstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Rated data acc. to CSA**

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

Rated voltage (Use group D / CSA)	300 V
Rated current (Use group D / CSA)	11 A

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

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

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

Reference to approval values	Specifications are maximum values, details - see approval certificate.
------------------------------	--

E60693
Rated voltage (Use group D / UL 1059)
Rated current (Use group D / UL 1059)

Packaging

Packaging	Box
VPE width	0

VPE length	0
VPE height	0

Classifications

ETIM 4.0	EC002637
eClass 6.2	27-26-07-04
eClass 8.1	27-44-04-02

ETIM 5.0	EC002637
eClass 7.1	27-44-04-02
eClass 9.0	27-44-04-02

Notes

Notes	<ul style="list-style-type: none"> Rated current related to rated cross-section & min. No. of poles. Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards. P on drawing = pitch
-------	--

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
----------------	--

Approvals

Approvals	
-----------	---

ROHS	Conform
------	---------

**OMNIMATE Signal - series BC/SC 3.81
SCDV-THR 3.81/08/90F 1.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergsstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Downloads**

Approval/Certificate/Document of
Conformity

[Declaration of the Manufacturer](#)

Brochure/Catalogue

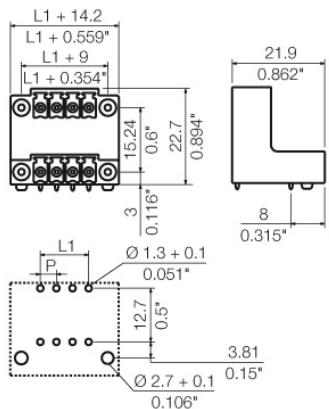
[FL DRIVES EN](#)
[MB DEVICE MANUF. EN](#)
[FL DRIVES DE](#)
[CAT 2 PORTFOLIOGUIDE EN](#)
[FL BUILDING SAFETY EN](#)
[FL APPL LED LIGHTING EN](#)
[FL INDUSTR.CONTROLS EN](#)
[FL MACHINE SAFETY EN](#)
[FL HEATING ELECTR EN](#)
[FL APPL_INVERTER EN](#)
[FL BASE_STATION EN](#)
[FL ELEVATOR EN](#)
[FL POWER_SUPPLY EN](#)
[FL 72H SAMPLE SER EN](#)
[PO OMNIMATE EN](#)

SMT white paper

[Download Whitepaper](#)

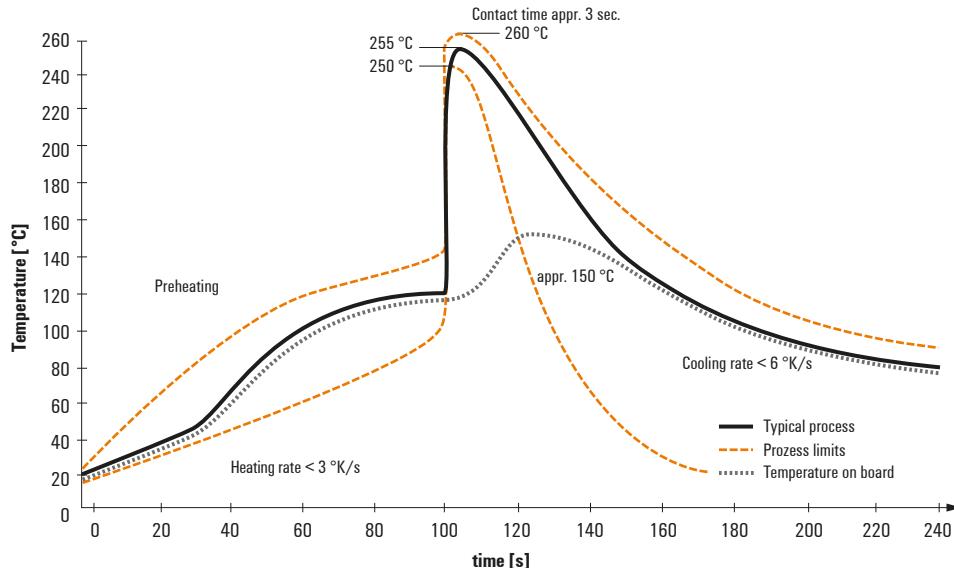
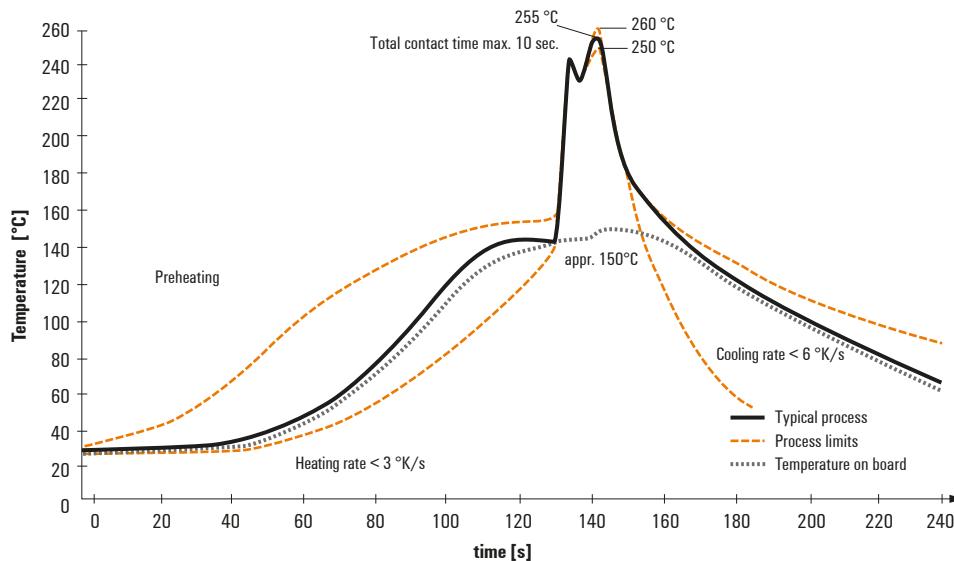
**OMNIMATE Signal - series BC/SC 3.81
SCDV-THR 3.81/08/90F 1.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergsstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings**Dimensional drawing**

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
 Klingenbergsstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
www.weidmueller.com

Single Wave:**Double Wave:****Wave soldering profiles**

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

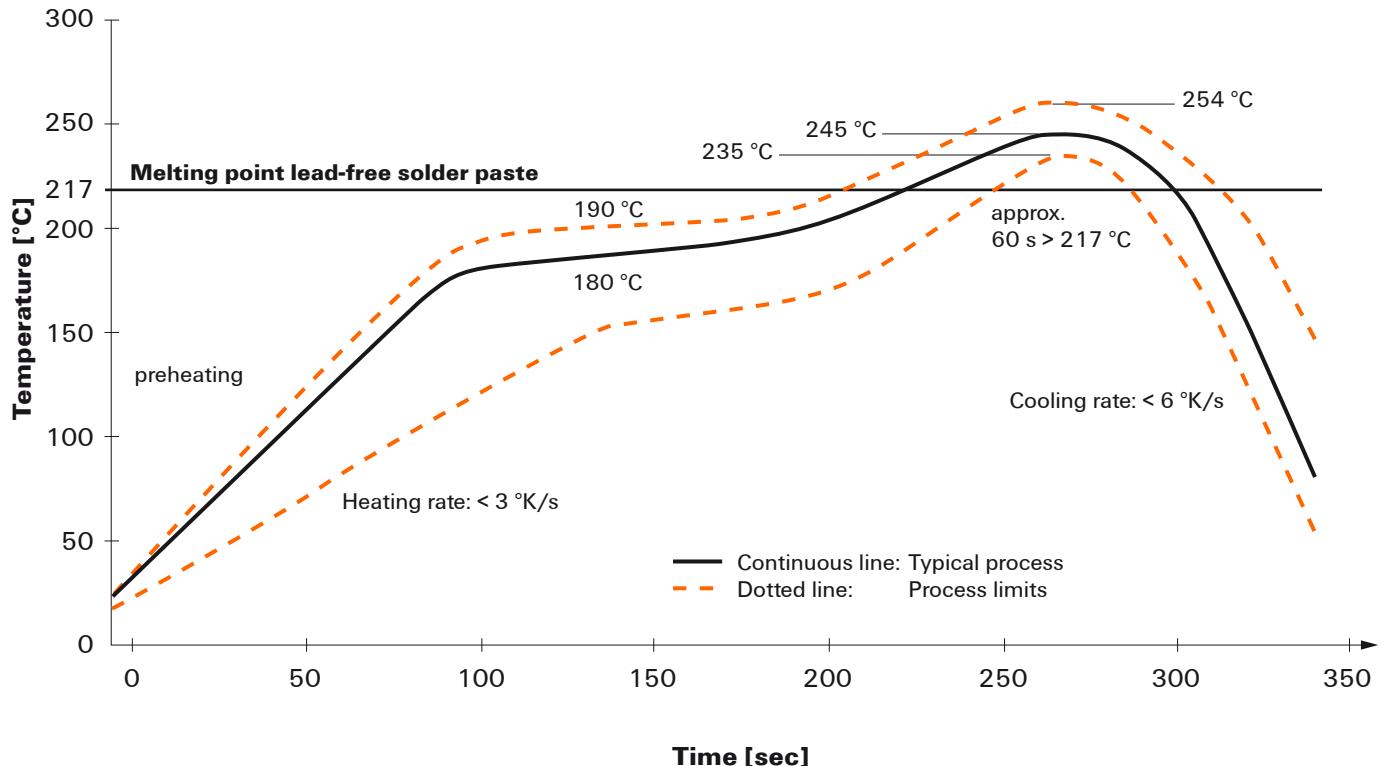
When choosing a suitable profile for your application, the following factors also need to be considered:

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

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

Recommended reflow soldering profile

Weidmüller Interface GmbH & Co. KG
 Klingenbergsstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
www.weidmueller.com



Reflow soldering profile

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

We have to consider the following parameters:

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

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically $\leq +3\text{K/s}$. 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.