

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Product image**









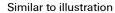












High-temperature-resistant two-tier SCDV-THR pin header for reflow soldering.

- 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**

Version	PCB plug-in connector, male header, Flange, THT/ THR solder connection, 3.81 mm, Number of poles: 26, 180°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>1036070000</u>
Туре	SCDV-THR 3.81/26/180F 3.2SN BK BX
GTIN (EAN)	4032248764747
Qty.	20 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 11 A
Packaging	Вох

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# **Technical data**

# **Dimensions and weights**

Depth	22.7 mm	Depth (inches)	0.894 inch
Height	25.1 mm	Height (inches)	0.988 inch
Height of lowest version	21.9 mm	Net weight	17.02 g
Width	59.92 mm	Width (inches)	2.359 inch

# **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	180°				
Number of poles	26				
Number of solder pins per pole	1				
Solder pin length (I)	3.2 mm				
Solder pin length tolerance	+0,02 / -0,02 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)+ 0,1 mm				
Outside diameter of solder pad	2.1 mm				
Template aperture diameter	1.9 mm				
L1 in mm	45.72 mm				
L1 in inches	1.8 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	≤5 mΩ				
Can be coded	Yes				
Tightening torque	Torque type		Mounting screw, PCB		
	Usage information		Tightening torque	min.	0.1 Nm
				max.	0.15 Nm
			Recommended screw	Part	PTSC KA
				number	2.2X4.5
					<u>WN1412</u>

## **Material data**

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 175	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		



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# **Technical data**

### Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	17.5 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	13.2 A	(Tu=40°C)	17 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	12.2 A	pollution degree II/2	320 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	160 V	pollution degree III/3	160 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	2.5 kV	class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage		Short-time withstand current resistance	
class/ contamination degree III/3	2.5 kV		3 x 1s with 76 A

### 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)	11 A	Rated current (Use group D / CSA)	11 A

## Rated data acc. to UL 1059

Institute (cURus)

Certificate No. (cURus)

Rated voltage (Use group B / UL 1059)	300 V
Rated current (Use group B / UL 1059)	11 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059) 300 V Rated current (Use group D / UL 1059) 11 A

• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

# **Packing**

Packaging	Box	VPE length	495 mm
VPE width	355 mm	VPE height	182 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	ECLASS 11.0	27-46-02-01

### Important note

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.
Notes	<ul> <li>Rated current related to rated cross-section &amp; min. No. of poles.</li> </ul>
	<ul> <li>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.</li> </ul>
	• P on drawing = pitch

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# **Technical data**

Approval	S
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Approvals



ROHS	Conform
UL File Number Search	E60693

### **Downloads**

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Engineering Data	STEP



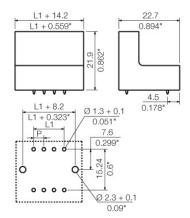
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# **Drawings**

# **Dimensional drawing**





# Recommended wave solderding profiles

### Weidmüller Interface GmbH & Co. KG

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

# Single Wave:



### **Double Wave:**



# Wave soldering profiles

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

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

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

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



# Recommended reflow soldering profile

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# **Reflow soldering profile**

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

We have to consider the following parameters:

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

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