

Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26

D-32758 Detmold Germany

www.weidmueller.com

Product image





Similar to illustration

High-temperature-resistant two-tier SCD-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 the same level and with access that is flush over the front board.
- 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, 90°, Solder pin length (I): 3.2 mm, tinned, black, Box
Order No.	<u>1974350000</u>
Туре	SCD-THR 3.81/26/90F 3.2SN BK BX
GTIN (EAN)	4032248683802
Qty.	20 pc(s).
Product data	IEC: 320 V / 17.5 A UL: 300 V / 11 A
Packaging	Вох

Creation date March 26, 2021 5:28:32 PM CET



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Technical data

Dimensions	s and weights	

Depth	21.9 mm	Depth (inches)	0.862 inch
Height	25.9 mm	Height (inches)	1.02 inch
Height of lowest version	22.7 mm	Net weight	23.79 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	90°			
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 (I	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			
Plugging force/pole, max.	8 N			
Pulling force/pole, max.	5.5 N			
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
				WN1412



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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		

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 (Tu=20°C)	13.9 A	Rated current, min. number of poles (Tu=40°C)	17 A
Rated current, max. number of poles (Tu=40°C)	12.3 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

Rated data acc. to CSA

Institute (CSA)	-	Certificate No. (CSA)	
	(1) .		
	-		200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated current (Use group B / CSA)	11 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Rated data acc. to UL 1059			
Institute (cURus)		Certificate No. (cURus)	
			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)	11 A	Rated current (Use group D / UL 1059)	11 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
Packaging	Box	VPE length	495 mm
VPE width	355 mm	VPE height	182 mm



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Technical data

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	standards and norms an		vered according international recognized the data sheet resp. fulfill decorative properties roducts can be evaluated on request.
Notes	Rated current related	to rated cross-section & min. No. of pole	S.
		to the component itself. Clearance and o dance with the relevant application stand	creepage distances to other components are to dards.
	• P on drawing = pitch		
	Long term storage of	the product with average temperature o	f 50 °C and average humidity 70%, 36 months
Approvals			
Approvals			
	S₽° L		
ROHS	Conform		
UL File Number Search	E60693		
Downloads			
Approval/Certificate/Document of			
Conformity	Declaration of the Ma	anufacturer	
Engineering Data	<u>STEP</u>		

Drawings

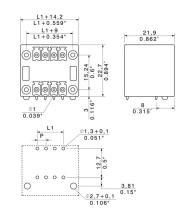


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Dimensional drawing



Wave Solder Profile

Recommended wave solderding profiles

Weidmüller 🟵

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Double Wave:

Single 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.

Reflow Solder Profile

Recommended reflow soldering profile



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Time [sec]

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.