

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Product image**

















Similar to illustration

Angled, two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

#### **General ordering data**

Version	PCB plug-in connector, male header, open side, THT solder connection, 3.50 mm, Number of poles: 6, 90°, Solder pin length (I): 3.5 mm, tinned, orange, Box
Order No.	<u>1728150000</u>
Туре	S2L 3.50/06/90 3.5SN OR BX
GTIN (EAN)	4032248039647
Qty.	174 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Box

Creation date March 25, 2021 12:08:40 AM CET



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# **Technical data**

## **Dimensions and weights**

Depth	14.2 mm	Depth (inches)	0.559 inch
Height	14 mm	Height (inches)	0.551 inch
Height of lowest version	10.5 mm	Net weight	1.93 g
Width	10.5 mm	Width (inches)	0.413 inch

## **System specifications**

Product family	OMNIMATE Signal - series B2L/S2L 3.50 - 2-row	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Outgoing elbow	90°
Number of poles	6	Number of solder pins per pole	1
Solder pin length (I)	3.5 mm	Solder pin dimensions	d = 1.0 mm, Octagonal
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (I	D)+ 0,1 mm
L1 in mm	7 mm	L1 in inches	0.276 inch
Number of rows	1	Pin series quantity	2
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch	Touch-safe protection acc. to DIN VDE 0470	IP 10
Can be coded	Yes	Plugging force/pole, max.	5 N
Pulling force/pole, max.	4 N		

#### **Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	23 μm Ni / 57 μm Sn glossy	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	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		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	10 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	10 A	(Tu=40°C)	9 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	8.5 A	pollution degree II/2	250 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	125 V	pollution degree III/3	80 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 77 A



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# **Technical data**

#### Rated data acc. to CSA

Institute (CSA)	SP.	Certificate No. (CSA)	
Rated voltage (Use group B / CSA)	150 V	Rated current (Use group B / CSA)	200039-1488444 5 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

	see approval certificate.		
Rated data acc. to UL 1059			
Institute (UR)	<i>717</i>	Certificate No. (UR)	
			E60693
Rated voltage (Use group B / UL 1059)	150 V	Rated voltage (Use group C / UL 1059)	50 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group C / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
Packaging	Box	VPE length	25 mm
VPE width	135 mm	VPE height	350 mm

# VPE width 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	Additional colours on request
	Gold-plated contact surfaces on request
	Spacing between rows: see hole layout
	Rated current related to rated cross-section & min. No. of poles.
	• Diameter of solder eyelet D = 1.3+0.1 mm
	• P on drawing = pitch
	<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>

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



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# **Technical data**

#### **Approvals**

Approvals



ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

Engineering Data	STEP	



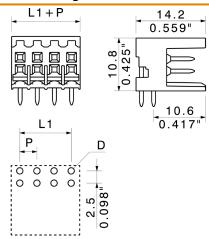
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# **Drawings**

# **Dimensional drawing**





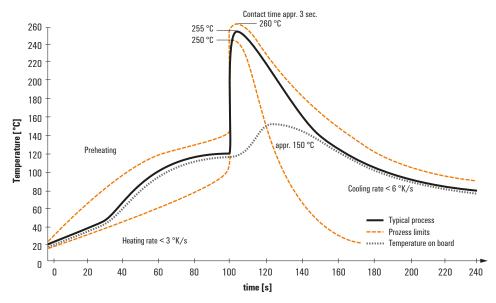
## Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

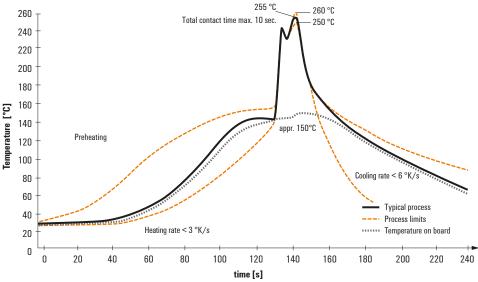
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Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

## 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.