

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image



















Similar to illustration

Double-level, staggered pin header for wave soldering at 3.50 mm pitch. They are available in closed and flanged versions. The male connectors provide space for labelling and can be coded.

General ordering data

Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 48, 180°, Solder pin length (I): 3.2 mm, tinned, orange, Box
Order No.	<u>1641350000</u>
Туре	SLD 3.50 V/48/180F 3.2 SN OR BX
GTIN (EAN)	4008190279752
Qty.	10 pc(s).
Product data	IEC: 200 V / 10.5 A
	UL: 300 V / 8 A
Packaging	Вох

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Technical data

Dimensions and weights

Depth	22 mm	Depth (inches)	0.866 inch
Height	27.4 mm	Height (inches)	1.079 inch
Height of lowest version	24.2 mm	Net weight	30.8 g
Width	91 mm	Width (inches)	3.583 inch

System specifications

7					
Product family	OMNIMATE Signal - series BL/SL	. 3.50			
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	180°				
Number of poles	48				
Number of solder pins per pole	1				
Solder pin length (I)	3.2 mm				
Solder pin length tolerance	0 / -0.3 mm				
Solder pin dimensions	d = 1.2 mm, Octagonal				
Solder pin dimensions = d tolerance	0 / -0,03 mm				
Solder eyelet hole diameter (D)	1.4 mm				
Solder eyelet hole diameter tolerance (D	0)+ 0,1 mm				
L1 in mm	80.5 mm				
L1 in inches	3.169 inch				
Number of rows	2				
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				
Volume resistance	≤5 mΩ				
Can be coded	Yes				
Plugging force/pole, max.	10 N				
Pulling force/pole, max.	8 N				
Tightening torque	Torque type	1	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	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Layer structure of solder connection	23 µm Ni / 57 µm Sn	Storage temperature, min.	
	glossy		-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		



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61 mm

115 mm

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Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	10.5 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	8 A	(Tu=40°C)	9 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	7 A	pollution degree II/2	200 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	160 V	pollution degree III/3	125 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 80 A

Rated data acc. to CSA

Institute (CSA)	(1)	Certificate No. (CSA)	154685-1318353
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	8 A	Rated current (Use group D / CSA)	8 A
Reference to approval values	Specifications are maximum values, details -		

Rated data acc. to UL 1059			
Institute (UR)	<i>27</i> 7.	Certificate No. (UR)	
			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)	8 A	Rated current (Use group D / UL 1059)	8 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			

Packaging

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
FCLASS 10.0	27-44-04-02	FCLASS 11.0	27-46-02-01

VPE length

VPE height

Box

100 mm



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Technical data

Imp	ortant	note
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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
	 Rated current related to rated cross-section & min. No. of poles.
	Spacing between rows: see hole layout
	• P on drawing = pitch
	 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.
	 Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	E60693

Downloads

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



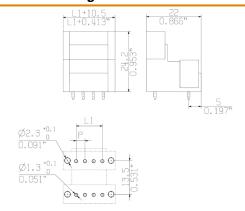
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Drawings

Dimensional drawing





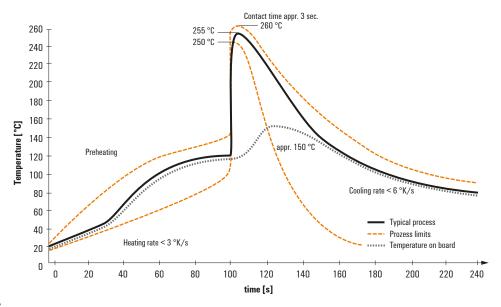
Recommended wave solderding profiles

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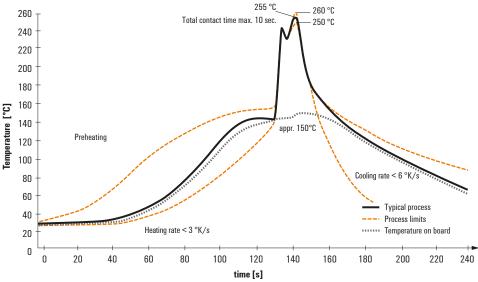
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Single Wave:



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.