

S2C-SMT 3.50/20/90G 2.1SN BK RL

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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 Germany

www.weidmueller.com

Product image



Similar to illustration

High-temperature-resistant male header

- Finger-safe
- Can be plugged into female plug B2CF 3.50 PUSH IN
- Plug-in direction is perpendicular or parallel to the circuit board (180° / 90°)
- Housing variants: closed (G) and with solder flange (LF)
- Packed either in a box (BX) or on anti-static tape-on-reel (RL)
- Suitable for reflow and wave soldering applications
- Pin length of either 1.5 mm or 3.2 mm

General ordering data

Version	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 20, 90°, Solder pin length (l): 2.1 mm, tinned, black, Tape
Order No.	3023780000
Type	S2C-SMT 3.50/20/90G 2.1SN BK RL
GTIN (EAN)	4099986945579
Qty.	235 items
Product data	IEC: 200 V / 13.4 A UL: 150 V / 9.5 A
Packaging	Tape

Creation date 27.02.2026 09:25:54 MEZ

Catalogue status / Drawings

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Technical data**Approvals**

Approvals



UL File Number Search

[UL Website](#)

Certificate No. (cURus)

E60693

Dimensions and weights

Depth	14.2 mm	Depth (inches)	0.5591 inch
Height	12.3 mm	Height (inches)	0.4843 inch
Height of lowest version	10.8 mm	Width	36.4 mm
Width (inches)	1.4331 inch	Net weight	5.46 g

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System specifications

Product family	OMNIMATE Signal - series B2C/S2C 3.50 - 2-row	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	3.50 mm
Pitch in inches (P)	0.138 "	Outgoing elbow	90°
Number of poles	20	Number of solder pins per pole	1
Solder pin length (l)	2.1 mm	Solder pin dimensions	d = 1.0 mm, Octagonal
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	31.50 mm	L1 in inches	1.240 "
Number of rows	1	Pin series quantity	2
Touch-safe protection acc. to DIN VDE 57 106	finger-safe unplugged/ back-of-hand-safe plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Can be coded	Yes	Plugging force/pole, max.	3.5 N
Pulling force/pole, max.	3.5 N		

Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIb
Comparative Tracking Index (CTI)	≥ 175	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of solder connection	1...3 µm Ni / 2...5 µm Sn matt
Layer structure of plug contact	2...5 µm Sn / 1...3 µm Ni	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	-120 °C	Temperature range, installation, min.	-40 °C
Temperature range, installation, max.	120 °C		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	13.4 A
Rated current, min. number of poles (Tu=40°C)	12 A	Rated voltage for surge voltage class / pollution degree II/2	200 V

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Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	80 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 80 A

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	150 V	Rated voltage (Use group C / CSA)	50 V
Rated voltage (Use group D / CSA)	150 V	Rated current (Use group B / CSA)	9.5 A
Rated current (Use group C / CSA)	9.5 A	Rated current (Use group D / CSA)	9.5 A

Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	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)	9.5 A	Rated current (Use group C / UL 1059)	9.5 A
Rated current (Use group D / UL 1059)	9.5 A	Reference to approval values	Specifications are maximum values, details - see approval certificate.

Packing

Packaging	Tape	VPE length	340.00 mm
VPE width	332.00 mm	VPE height	79.00 mm
Tape depth (T2)	15.10 mm	Tape width (W)	56 mm
Tape pocket depth (K0)	14.60 mm	Tape pocket height (A0)	14.50 mm
Tape pocket width (B0)	43.60 mm	Tape pocket separation (P1)	20.00 mm
Tape hole separation (E)	1.75 mm	Tape pocket separation (F)	26.20 mm
Tape reel diameter \varnothing (A)	330 mm	Surface resistance	Rs = 109 - 1012 Ω

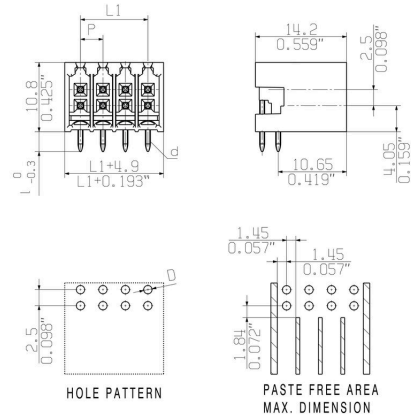
Important note

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 style="list-style-type: none"> In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

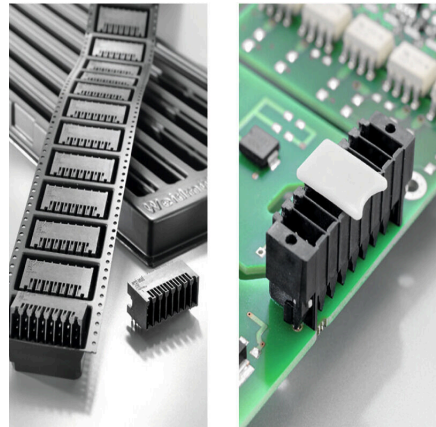
Classifications

ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

Dimensional drawing



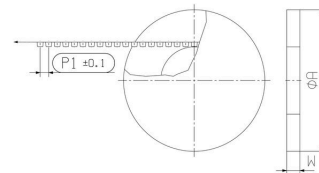
Product benefits



Optimised for the SMT process
 Safe board-to-board connection

Drawings

Dimensional drawing



Dimensional drawing

