

**USB3.1C S1H DN1 RL****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**General ordering data**

Version	OMNIMATE Data - USB jack, USB jacks, 10 Gbit/s, SMD solder connection, 90°, ≥ 10000, Pitch in mm (P): 0.50 mm, Number of poles: 24, LCP, black, Reel
Order No.	<a href="#">2987560000</a>
Type	USB3.1C S1H DN1 RL
GTIN (EAN)	4099986855052
Qty.	1,050 pc(s).
Packaging	Reel

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## Technical data

## Dimensions and weights

Depth	7.9 mm	Depth (inches)	0.311 inch
Height	3.21 mm	Height (inches)	0.126 inch
Width	8.94 mm	Width (inches)	0.352 inch
Net weight	10 g		

## System specifications

Mounting onto the PCB	SMD solder connection	Number of poles	24
Number of solder pins per pole	1	Outgoing elbow	90°
Performance-Category	10 Gbit/s	Pitch in inches (P)	0.02 "
Pitch in mm (P)	0.5 mm	Plugging cycles	≥ 10000
Product family	OMNIMATE Data - USB jack	Protection degree	IP20
Shield surface	nickel-plated	Shield tabs	none
Shielding	360° shield contact	Shielding material	Brass
Side termination, characteristic	None	Solder pin length (l)	1.15 mm
Soldering process	Reflow soldering, Manual soldering	Transmission rate	10 Gbit/s

## Electrical properties

Dielectric strength, contact / contact	750 V AC	Insulation strength	≥ 100 MΩ
Rated voltage	5 V		

## Material data

Insulating material	LCP	Colour	black
Colour chart (similar)	RAL 9011	Insulation strength	≥ 100 MΩ
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact base material	Copper alloy	Contact material	Gold over nickel
Contact surface	Gold over nickel	Operating temperature, min.	-40 °C
Operating temperature, max.	80 °C		

## Packing

Packaging	Reel	VPE length	0
VPE width	0	VPE height	0

## Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ECLASS 9.1	27-44-04-02
ECLASS 10.0	27-44-04-02	ECLASS 11.0	27-46-02-01
ECLASS 12.0	27-46-02-01		

## Downloads

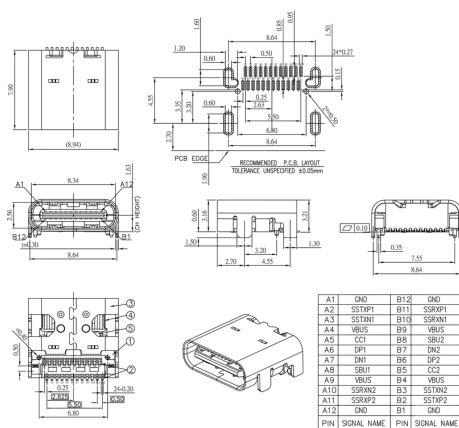
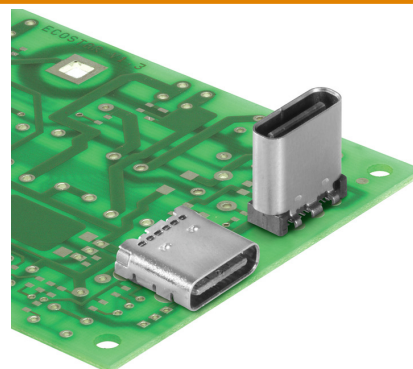
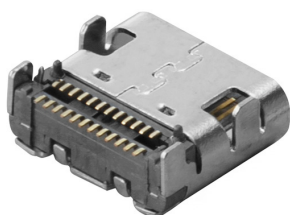
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

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## Drawings



## 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  $\leq +3\text{K/s}$ . 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  $\geq -6\text{K/s}$  solder is cured. Board and components cool down while avoiding cold cracks.