

USB3.1C S1V DN4 RL**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**General ordering data**

Version	OMNIMATE Data - USB jack, PCB plug-in connector, Type C, 10 Gbit/s, SMD solder connection, 180°, Plugging cycles: ≥ 10000, Pitch in mm (P): 0.50, Number of poles: 24, LCP, Reel
Order No.	3100390000
Type	USB3.1C S1V DN4 RL
GTIN (EAN)	4099987137645
Qty.	1,000 pc(s).
Packaging	Reel

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Technical data

Dimensions and weights

Depth	4.3 mm	Depth (inches)	0.169 inch
Height	9.25 mm	Height (inches)	0.364 inch
Width	8.94 mm	Width (inches)	0.352 inch
Net weight	10 g		

System specifications

LED	No	Mounting onto the PCB	SMD solder connection
Number of poles	24	Number of solder pins per pole	1
Outgoing elbow	180°	Performance-Category	10 Gbit/s
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	Yes	Shielding material	Brass
Side termination, characteristic	Solder flange	Solder pin length (l)	1.15 mm
Soldering process	Reflow soldering, Manual soldering	Transmission rate	10 Gbit/s
Type of connection	Socket connector		

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	Phosphor bronze alloy
Contact surface	Gold over nickel	Operating temperature, min.	-30 °C
Operating temperature, max.	80 °C		

Packing

Packaging	Reel	VPE length	0 mm
VPE width	0 mm	VPE height	0 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	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	ECLASS 13.0	27-46-02-01
ECLASS 14.0	27-46-02-01	ECLASS 15.0	27-46-02-01

Approvals

ROHS	Conform
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Environmental Product Compliance

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

Downloads

Technical Documentation	3100390000_USB3.1C S1V DN4 RL_20250424 Customer Drawing Customer Drawing
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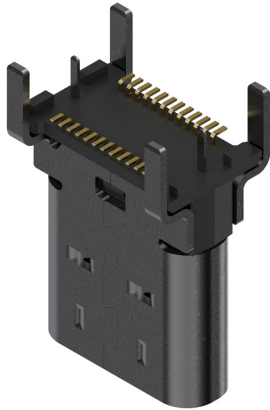
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Drawings



Recommended reflow soldering profile

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Klingenbergstraße 16

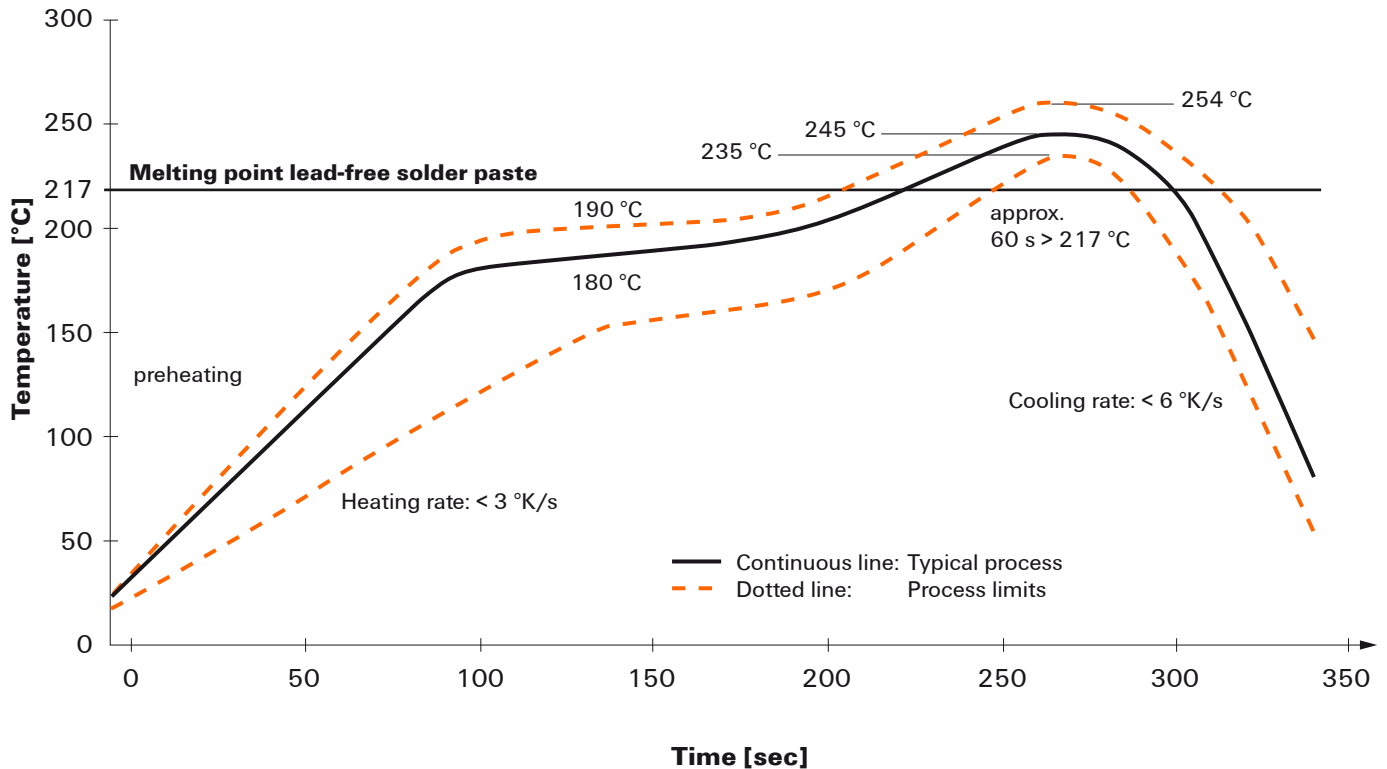
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Reflow soldering profile

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.