

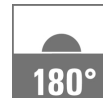
USB3.0A R1V 2.0N3 RL BL**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Universal serial bus 2.0 and 3.0 (SuperSpeed); Type A connectors meet the requirements for high resistance and provide reliable connectivity.

- Up to 5000 plugging cycles
- THT, THR or SMD soldering processes
- Available in design types 180° (vertical/upright) or 90° (horizontal/flat-lying)
- Packed either in a tray (TY) or on a roll (tape-on-reel, RL)
- Reinforced gold layer for improved corrosion protection

General ordering data

Version	OMNIMATE Data - USB jack, female header, 5 Gbps, THT/THR solder connection, 180°, Pitch in mm (P): 2.00 mm, Number of poles: 8, PA 9T, black, Tape
Order No.	2562980000
Type	USB3.0A R1V 2.0N3 RL BL
GTIN (EAN)	4050118572001
Qty.	140 pc(s).
Packaging	Tape

Creation date March 29, 2021 7:36:17 PM CEST

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Technical data

Dimensions and weights

Depth	5.72 mm	Depth (inches)	0.225 inch
Height	17 mm	Height (inches)	0.669 inch
Height of lowest version	15 mm	Net weight	5 g
Width	13.1 mm	Width (inches)	0.516 inch

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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System specifications

LED	No	Mounting onto the PCB	THT/THR solder connection
Number of poles	8	Number of solder pins per pole	1
Outgoing elbow	180°	Performance-Category	5 Gbps
Pitch in mm (P)	2 mm	Plugging force/pole, max.	35 N
Product family	OMNIMATE Data - USB jack	Protection degree	IP20
Pulling force/pole, max.	10 N	Shield surface	nickel-plated
Shield tabs	none	Shielding	Yes
Shielding material	Brass	Solder pin length (l)	2 mm
Soldering process	Reflow soldering, Manual soldering, Wave soldering	Transmission rate	5 Gbps
Type of connection	Socket connector		

Electrical properties

Dielectric strength, contact / contact	100 V AC	Rated current	1.8 A at 250 V AC
Rated voltage	30 V		

Material data

Insulating material	PA 9T	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact base material	Phosphorus bronze
Contact surface	Gold over nickel	Layer structure of plug contact	≥ 15 µ" Au
Storage temperature, min.	-40 °C	Storage temperature, max.	85 °C
Operating temperature, min.	-55 °C	Operating temperature, max.	85 °C

Packing

Packaging	Tape	VPE length	0
VPE width	0	VPE height	0
Tape reel diameter Ø (A)	330 mm	Surface resistance	Rs = 10 ⁹ - 10 ¹² Ω

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

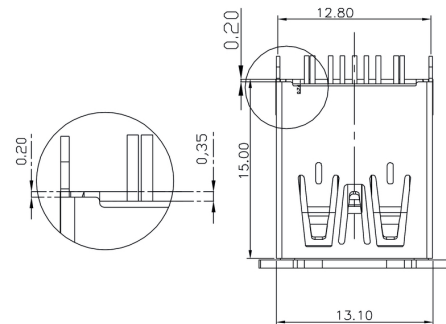
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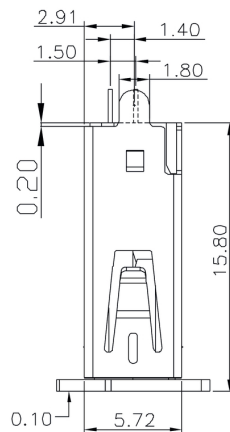
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Drawings

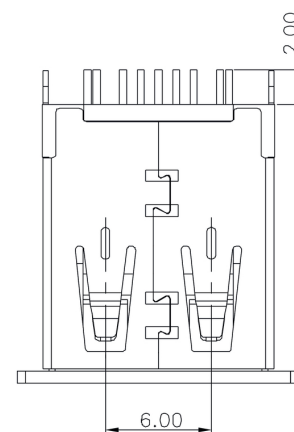
Dimensioned drawing



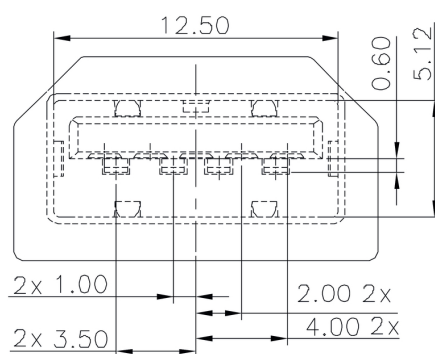
Dimensioned drawing



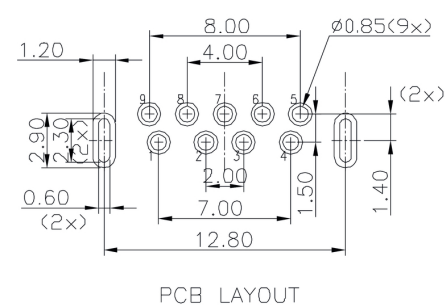
Dimensioned drawing



Dimensioned drawing



PCB design



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Recommended wave soldering profiles

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Fax: +49 5231 14-292083
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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.

We reserve the right to make technical changes.

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.