

USB2.0A R1V 2.5N4 TY BK

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26
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Germany

www.weidmueller.com



USB as a reliable data interface for your device in industrial use. Due to the many advantages, USB sockets are always used most in the electrical industry.

The extensive portfolio of USB-A, -B - C and -Micro components enables future-proof device design with speeds of up to 10 Gbit/s. Our USB PCB sockets support the robust standards USB 2.0, 3.0 and 3.1 for fast and easy data transfer.

The individual connectors meet the requirements for high durability and offer reliable connectivity.

- Up to 10.000 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
- USB 3.1 sockets support data rates of 10 Gbit/s for fast data transfer
- USB-C sockets enable error-free plugging due to a symmetrical design
- Robust plug & play operation - connect and disconnect without shutting down or restarting the system

General ordering data

Version	OMNIMATE Data - USB jack, PCB plug-in connector, USB 2.0, Type A, 480 Mbps, THT/THR solder connection, 180°, Plugging cycles: ≥ 1500, Number of poles: 4, LCP, Gold over nickel, Tray (manual assembly)
Order No.	2563730000
Type	USB2.0A R1V 2.5N4 TY BK
GTIN (EAN)	4050118572346
Qty.	100 items
Packaging	Tray (manual assembly)
Delivery status	This article will no longer be available in the future.
Available until	2025-11-01T00:00:00+01:00

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Technical data

Approvals

ROHS	Conform
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Dimensions and weights

Depth	7.12 mm	Depth (inches)	0.2803 inch
Height	19.3 mm	Height (inches)	0.7598 inch
Height of lowest version	15 mm	Width	14.5 mm
Width (inches)	0.5709 inch	Net weight	2.5 g

Environmental Product Compliance

RoHS Compliance Status	Compliant
REACH SVHC	No SVHC above 0.1 wt%

System specifications

Number of poles	4	LED	No
Solder pin length (l)	2.9 mm	Mounting onto the PCB	THT/THR solder connection
Pitch in inches (P)	0.079 "	Shielding material	Brass
Shielding	Yes	Side termination, characteristic	Solder flange
Plugging force/pole, max.	35 N	Transmission rate	480 Mbps
Pulling force/pole, max.	10 N	Number of solder pins per pole	1
Type of connection	Solder connection	Product family	OMNIMATE Data - USB jack
Pitch in mm (P)	2.00 mm	Protection degree	IP20
Plugging cycles	≥ 1500	Outgoing elbow	180°
Shield surface	nickel-plated	Shield tabs	none
Performance-Category	480 Mbps	Soldering process	Reflow soldering, Manual soldering, Wave soldering
Solder pin dimensions	Octagonal	Tolerance of solder pin position	± 0.1 mm

Electrical properties

Dielectric strength, contact / contact	500 V AC	Insulation resistance	≥ 1000 MΩ
Nominal voltage	30 V	Rated current	1.5 A at 250 V AC

Material data

Insulating material	LCP	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Insulation resistance	≥ 1000 MΩ
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact base material	Phosphorus bronze	Contact material	Cu-alloy
Contact surface	Gold over nickel	Layer structure of plug contact	30...80 μ" Ni / ≥ 30 μ" Au
Storage temperature, min.	-20 °C	Storage temperature, max.	60 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	85 °C

Packing

Packaging	Tray (manual assembly)	VPE length	269.00 mm
VPE width	241.00 mm	VPE height	13.00 mm

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Important note

Notes

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		

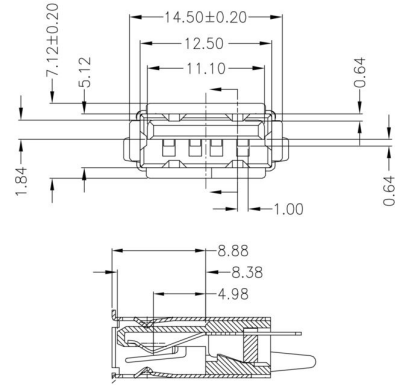
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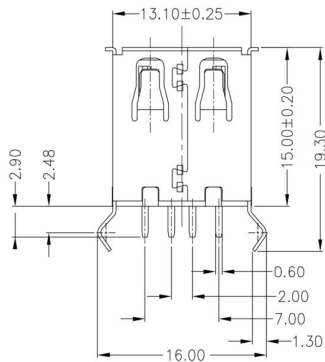
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Drawings

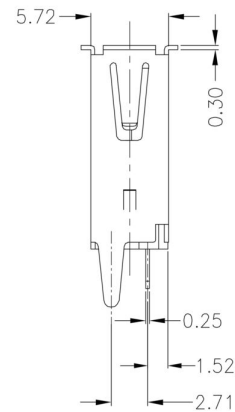
Dimensioned drawing



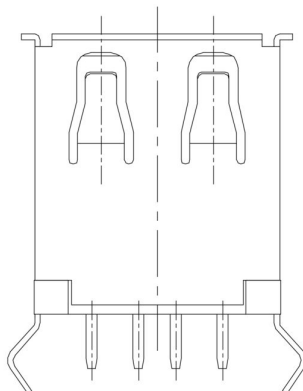
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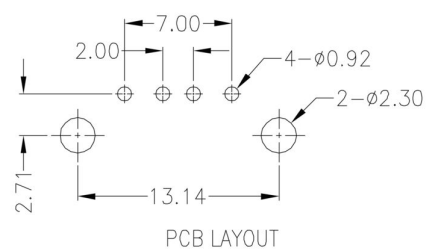
Dimensioned drawing



Dimensioned drawing



PCB design



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Drawings

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Legend

USB	3.0A	R	1	V	3.0	N	4	TY	BL	USB3.0A R1V 3.0N4 TY BL
Colour / Special Option		BL	blue (plastic)							
		BK	black (plastic)							
		WH	white (plastic)							
		SO	customized product							
Packaging		TY	Tray in box (manual assembly)							
		RL	Tape on Reel (automated assembly)							
		TU	Tube							
Contact surface thickness		4	1 = 3µ", 2 = 6µ", 3 = 15µ", 4 = 30µ", 5 = 50µ"							
		N	no use							
Solder Pin length		3.2	3.2 mm							
		1.6	1.6 mm							
		D	SMD							
Direction		H	Horizontal (90°, side entry)							
		U	Horizontal, Upright 90°							
		V	Vertical (180°, top entry)							
Number of Ports		1	1 Port							
		21; 41; ...	multi ports about each other, Multilevel							
Assembly on PCB		R	Through Hole Reflow - THR Soldering process: Wave or Reflow soldering							
		S	Surface Mount Technology - SMT Soldering process: Reflow soldering							
		T	Through Hole Technology - THT Soldering process: Wave							
Type / Performance		2.0A	USB 2.0 Type A							
		3.0A	USB 3.0 Type A							