

USB2.0A T1H 2.5N4 TY BK

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, 480 Mbps, THT solder connection, 90°, Pitch in mm (P): 2.00 mm, Number of poles: 4, PBT, black, Tray (manual assembly)
Order No.	2563710000
Type	USB2.0A T1H 2.5N4 TY BK
GTIN (EAN)	4050118572322
Qty.	100 pc(s).
Packaging	Tray (manual assembly)

Creation date July 21, 2021 5:35:28 PM CEST

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Technical data

Dimensions and weights

Depth	14 mm	Depth (inches)	0.551 inch
Height	9.74 mm	Height (inches)	0.383 inch
Height of lowest version	6.9 mm	Width	14.5 mm
Width (inches)	0.571 inch	Net weight	0.001 g

System specifications

LED	No	Mounting onto the PCB	THT solder connection
Number of poles	4	Number of solder pins per pole	1
Outgoing elbow	90°	Performance-Category	480 Mbps
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)	2.84 mm
Soldering process	Manual soldering, Wave soldering	Transmission rate	480 Mbps
Type of connection	Socket connector		

Electrical properties

Dielectric strength, contact / contact	500 V AC	Rated current	1.5 A at 250 V AC
Rated voltage	30 V		

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	UL 94 flammability rating	V-0
Contact base material	Phosphorus bronze	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	255 mm
VPE width	204 mm	VPE height	17 mm

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	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		

Data sheet**USB2.0A T1H 2.5N4 TY BK**

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Technical data**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E471884

Downloads

Engineering Data	STEP
Catalogues	Catalogues in PDF-format

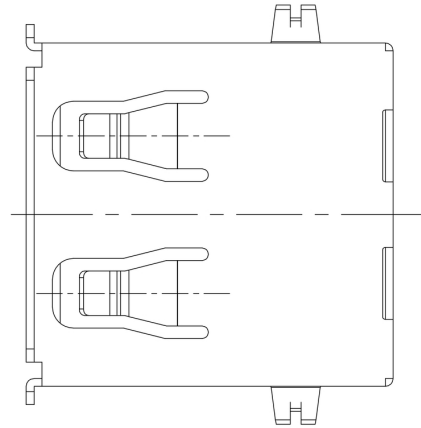
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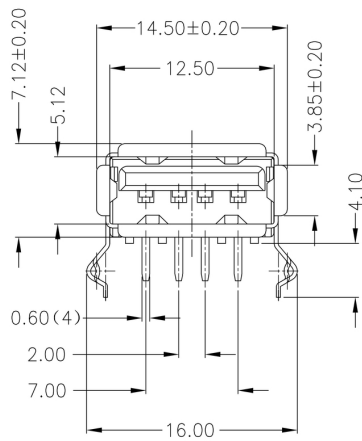
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Drawings

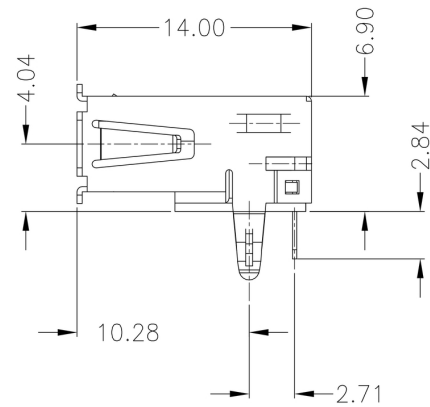
Dimensioned drawing



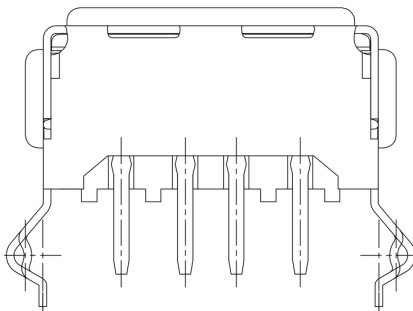
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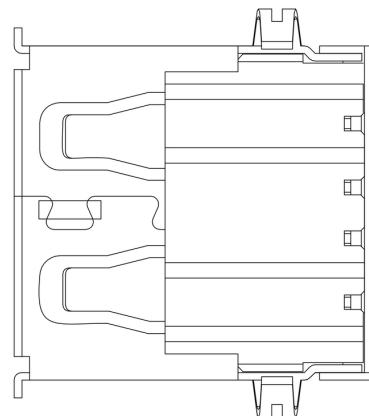
Dimensioned drawing



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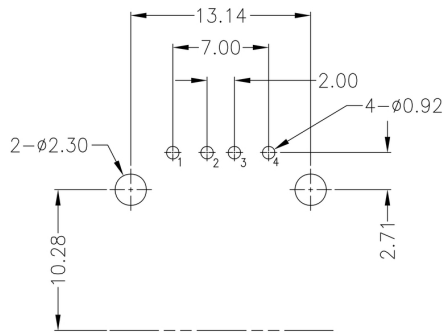
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Drawings**PCB design**

PCB LAYOUT

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Drawings

Legend

Code	Description	Value	Meaning
USB	Product family	USB	USB
3.0A	Type / Performance	3.0A	USB 3.0 Type A
R	Assembly on PCB	R	Through Hole Reflow - THR
1	Number of Ports	1	1 Port
V	Direction	V	Vertical (180°, top entry)
3.0	Type / Performance	3.0	USB 2.0 Type A
N	Contact surface thickness	N	no use
4	Contact surface thickness	4	1 = 3µm, 2 = 6µm, 3 = 15µm, 4 = 30µm, 5 = 50µm
TY	Packaging	TY	Tray in box (manual assembly)
BL	Colour / Special Option	BL	blue (plastic)
		BK	black (plastic)
		WH	white (plastic)
		SO	customized product
		RL	Tape on Reel (automated assembly)
		TU	Tube
	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	21; 41; ...	multi ports about each other, Multilevel
	Assembly on PCB	S	Soldering process: Wave or Reflow soldering
		T	Surface Mount Technology - SMT
			Soldering process: Reflow soldering
			Through Hole Technology - THT
			Soldering process: Wave
	Type / Performance	2.0A	USB 2.0 Type A
		3.0A	USB 3.0 Type A

Recommended wave soldering profiles

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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.