

USB2.0A T1V 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 solder connection, 180°, Plugging cycles: ≥ 1500, Number of poles: 4, PBT, Gold over nickel, Tray (manual assembly) |
| Order No. | 1985910000 |
| Type | USB2.0A T1V 2.5N4 TY BK |
| GTIN (EAN) | 4050118370843 |
| 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 |
|------|---------|

Dimensions and weights

| | | | |
|--------------------------|-------------|-----------------|-------------|
| Depth | 7.12 mm | Depth (inches) | 0.2803 inch |
| Height | 19.6 mm | Height (inches) | 0.7717 inch |
| Height of lowest version | 15.3 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 solder connection |
| Pitch in inches (P) | 0.079 " | Shielding material | Brass |
| Shielding | Yes | Side termination, characteristic | Solder flange |
| Transmission rate | 480 Mbps | 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 | 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 |

Material data

| | | | |
|----------------------------------|-------------------|---------------------------------|----------------------------|
| Insulating material | PBT | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | II |
| Comparative Tracking Index (CTI) | ≥ 500 | Insulation resistance | ≥ 1000 MΩ |
| Moisture Level (MSL) | | 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. | -40 °C | Storage temperature, max. | 60 °C |
| Operating temperature, min. | -40 °C | Operating temperature, max. | 60 °C |

Packing

| | | | |
|-----------|------------------------|------------|-----------|
| Packaging | Tray (manual assembly) | VPE length | 267.00 mm |
| VPE width | 239.00 mm | VPE height | 11.00 mm |

Important note

Notes

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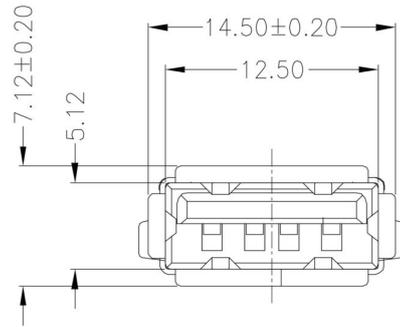
Technical data

Classifications

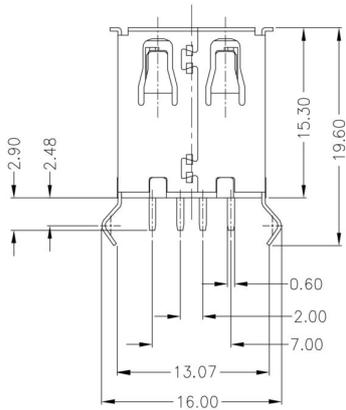
| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002637 | ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 | | |

Drawings

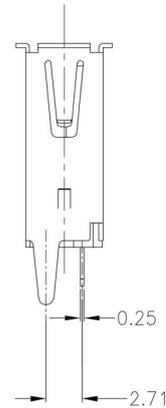
Dimensioned drawing



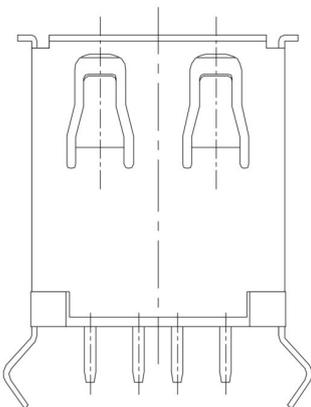
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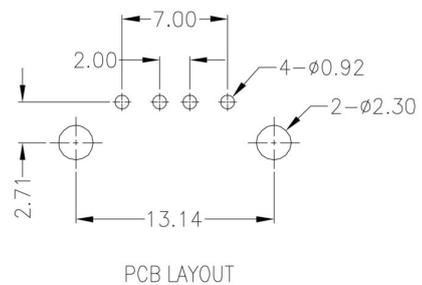
Dimensioned drawing



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 | | | | | | | |