



Material Properties:

|                               |                 |
|-------------------------------|-----------------|
| Insulator Material            | LCP             |
| Insulator Color               | Black           |
| Insulator Flammability Rating | UL94 V-0        |
| Pin Material                  | Brass           |
| Pin Plating                   | Tin over Nickel |
| Flange Screw                  | M2.5            |

General Information:

|                       |                      |
|-----------------------|----------------------|
| Operating Temperature | -40 °C up to +130 °C |
|-----------------------|----------------------|

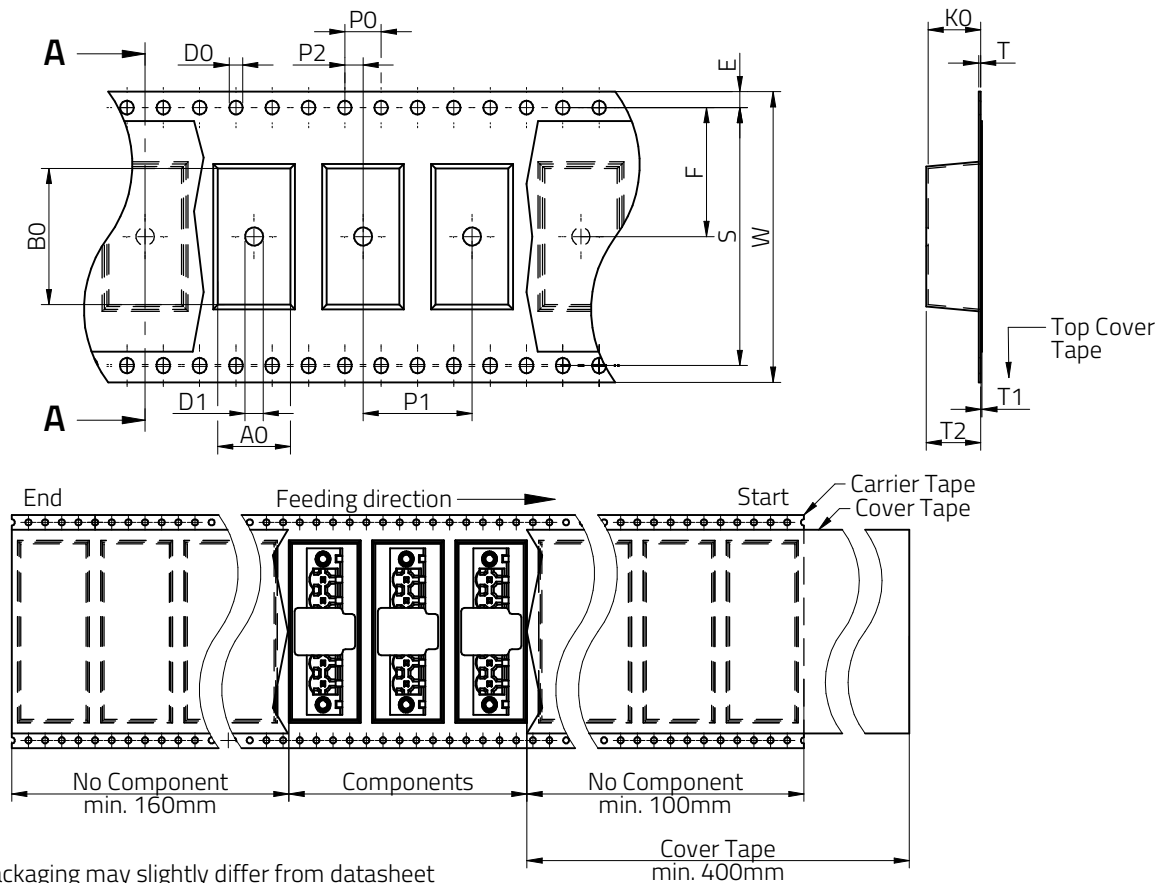
Electrical Properties:

| Properties           |                | Test conditions | Value |      | Unit   | Tol. |
|----------------------|----------------|-----------------|-------|------|--------|------|
|                      |                |                 | cULus | VDE  |        |      |
| Rated Current        | I <sub>R</sub> |                 | 15    | 18   | A      |      |
| Working Voltage      |                |                 | 300   | 400  | V (AC) |      |
| Withstanding Voltage |                | 1 min           | 1600  | 2200 | V (AC) |      |
| Contact Resistance   | R <sub>C</sub> |                 | 20    | 20   | mΩ     | max. |

Certification:

|                |                                     |
|----------------|-------------------------------------|
| RoHS Approval  | Compliant [2011/65/EU&2015/863]     |
| REACH Approval | Conform or declared [(EC)1907/2006] |
| cULus Approval | E315414                             |
| VDE Approval   | 40059486                            |

Packaging Specification - Tape: [mm]

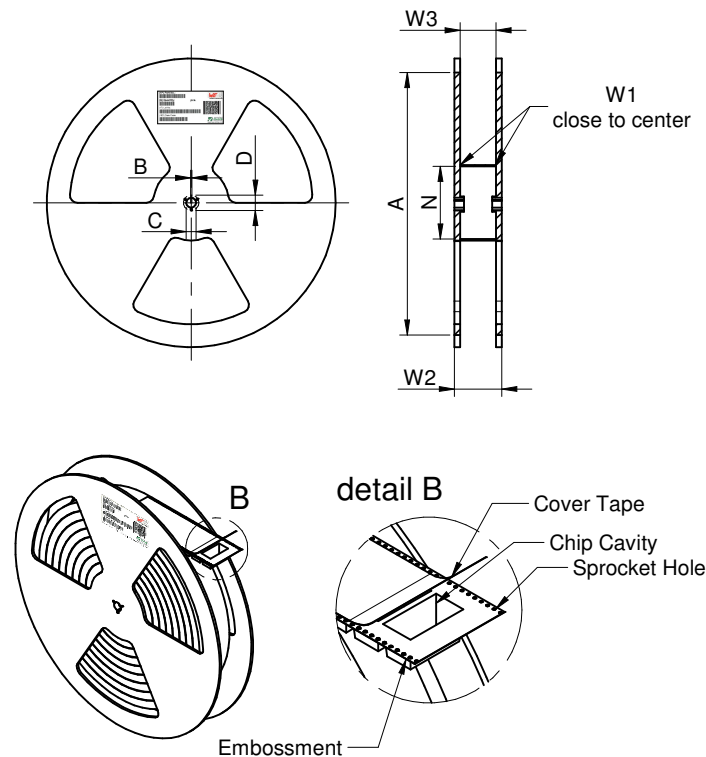


NB: Actual packaging may slightly differ from datasheet

Packaging is referred to the international standard IEC 60286-3:2019

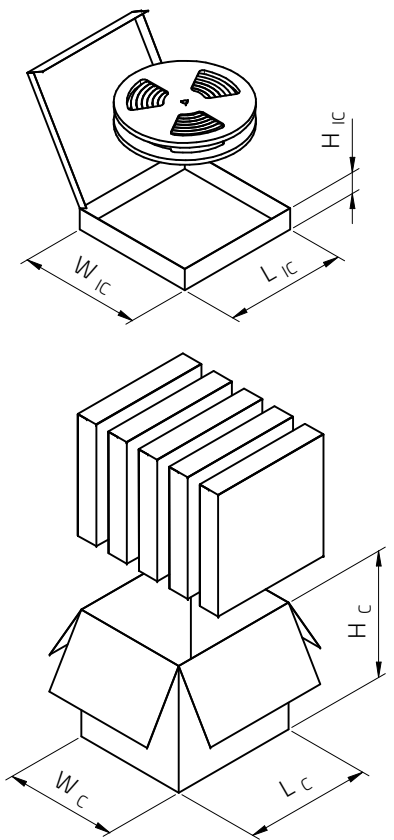
| A0   | B0   | W         | T    | T1   | T2   | K0   | P0   | P1   | P2    | D0      | D1   | E    | S    | F    | Tape Type 3 | VPE / packaging unit |
|------|------|-----------|------|------|------|------|------|------|-------|---------|------|------|------|------|-------------|----------------------|
| typ. | typ. | +0.3/-0.3 | max. | max. | max. | typ. | ±0.1 | ±0.1 | ±0.15 | +0.1/-0 | min. | ±0.1 | ±0.1 | ±0.1 |             | pcs.                 |
| 8,2  | 42.2 | 56        | 1    | 0,1  | 18.5 | 17.5 | 4    | 20   | 2,0   | 1.5     | 2,0  | 1.75 | 52.4 | 26.2 | Polystyrene | 160                  |

Packaging Specification - Reel: [mm]



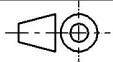
|           | A (mm) | B (mm) | C (mm) | D (mm) | N (mm) | W1 (mm) | W2 (mm) | W3 (mm) | W3 (mm) | Material |
|-----------|--------|--------|--------|--------|--------|---------|---------|---------|---------|----------|
| Tolerance | ± 2.0  | min.   | min.   | min.   | min.   | + 2.0   | max.    | min.    | max.    |          |
| Value     | 330.00 | 1.5</  |        |        |        |         |         |         |         |          |

Packaging Specification - Carton: [mm]



NB: Actual packaging may slightly differ from datasheet

| L <sub>c</sub> (mm) | W <sub>c</sub> (mm) | H <sub>c</sub> (mm) | L <sub>c</sub> (mm) | W <sub>c</sub> (mm) | H <sub>c</sub> (mm) | No. of reel<br>outer packaging | Outer Packaging<br>Unit | Material |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------------------|-------------------------|----------|
| typ.                | typ.                | typ.                | typ.                | typ.                | typ.                | reel.                          | PCS.                    |          |
| 325                 | 345                 | 355                 | 335                 | 335                 | 60                  | 5                              | 800                     | Paper    |

|                                                                                                                                                                                                                                                                                                                                                                       |                                    |                        |                                 |                                      |                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------|---------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <div><div></div></div> | CHECKED<br>JHe                     | REVISION<br>001.001    | DATE (YYYY-MM-DD)<br>2025-01-27 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION<br>METHOD<br> |
| DESCRIPTION<br><b>WR-TBL Series 7017 - PCB<br/>Header - THR</b>                                                                                                                                                                                                                                                                                                       | ORDER CODE<br><b>691701730003B</b> |                        |                                 |                                      |                                                                                                               |
| SIZE/TYPE<br>5.00mm pitch - Vertical cable entry with flanges                                                                                                                                                                                                                                                                                                         |                                    | BUSINESS UNIT<br>eiCan | STATUS<br>Valid                 | PAGE<br>4/8                          |                                                                                                               |

This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment where a higher safety standard and reliability standard is

Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

| Profile Feature                                      |              | Value                            |
|------------------------------------------------------|--------------|----------------------------------|
| Preheat Temperature Min                              | $T_{s\ min}$ | 150 °C                           |
| Preheat Temperature Max                              | $T_{s\ max}$ | 200 °C                           |
| Preheat Time $t_s$ from $T_{s\ min}$ to $T_{s\ max}$ | $t_s$        | 60 - 120 seconds                 |
| Ramp-up Rate ( $T_L$ to $T_p$ )                      |              | 3 °C/ second max.                |
| Liquidous Temperature                                | $T_L$        | 217 °C                           |
| Time $t_L$ maintained above $T_L$                    | $t_L$        | 60 - 150 seconds                 |
| Peak package body temperature                        | $T_p$        | $T_p \leq T_c$ , see Table below |
| Time within 5°C of actual peak temperature           | $t_p$        | 20 - 30 seconds                  |
| Ramp-down Rate ( $T_p$ to $T_L$ )                    |              | 6 °C/ second max.                |
| Time 25°C to peak temperature                        |              | 8 minutes max.                   |

refer to IPC/ JEDEC J-STD-020E

Package Classification Reflow Temperature ( $T_c$ ):

| Properties                                           | Volume mm <sup>3</sup><br><350 | Volume mm <sup>3</sup><br>350-2000 | Volume mm <sup>3</sup><br>>2000 |
|------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------|
| PB-Free Assembly   Package Thickness < 1.6 mm        | 260 °C                         | 260 °C                             | 260 °C                          |
| PB-Free Assembly   Package Thickness 1.6 mm - 2.5 mm |                                |                                    |                                 |

Further information

Component Libraries:

-  [3D\\_ConTBL\\_691701730003B](#)
-  [Altium\\_WR-TBL\\_Pluggable Connector \(25b\)](#)
-  [Downloads\\_CADENCE\\_WR-TBL \(25a\)](#)
-  [Eagle\\_WR-TBL Pluggable Connector \(25a\)](#)
-  [IGS\\_ConTBL\\_691701730003B](#)
-  [STP\\_ConTBL\\_691701730003B](#)

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|                                                                                                                                                                                                                                                                                                                                                    |  |  |                |                     |                                 |                                      |                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------|---------------------|---------------------------------|--------------------------------------|-----------------------|
|     |  |  | CHECKED<br>JHe | REVISION<br>001.001 | DATE (YYYY-MM-DD)<br>2025-01-27 | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------|---------------------|---------------------------------|--------------------------------------|-----------------------|

## Cautions and Warnings:

The following conditions apply to all goods within the product series of the Connectors of Würth Elektronik eiSos GmbH & Co. KG:

### General:

- This mechanical component is designed and manufactured for use in general electronic equipment.
- Würth Elektronik must be asked for written approval (following the PPAP procedure) before incorporating the components into any equipment in fields such as military, aerospace, aviation, nuclear control, submarine, transportation (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network, etc. where higher safety and reliability are especially required and/or if there is the possibility of direct damage or human injury.
- Mechanical components that will be used in safety-critical or high-reliability applications, should be pre-evaluated by the customer.
- The mechanical component is designed and manufactured to be used within the datasheet specified values. If the usage and operation conditions specified in the datasheet are not met, the component may be damaged or dissolved.
- Do not drop or impact the components, the component may be damaged.
- Prevent any damage or scratches on the component, especially on the actuator.
- Direct mechanical impact to the product shall be prevented (e.g overlapping of the PCB's).
- Würth Elektronik products are qualified according to international standards, which are listed in each product reliability report. Würth Elektronik does not warrant any customer qualified product characteristics beyond Würth Elektronik's specifications, for its validity and sustainability over time.
- The responsibility for the applicability of the customer specific products and use in a particular customer design is always within the authority of the customer. All technical specifications for standard products do also apply to customer specific products.
- The mechanical component is designed to be used along with Würth Elektronik counterparts and tools. Würth Elektronik cannot ensure the reliability of these components while being used with other products.

### Product Specific:

### Soldering:

- The solder profile must comply with the technical product specifications. All other profiles will void the warranty.
- All other soldering methods are at the customers' own risk.

### Cleaning and Washing:

- Washing agents used during the production to clean the customer application might damage or change the characteristics of the component, body, pins and termination. Washing agents may have a negative effect on the long-term functionality of the product.
- Using a brush during the cleaning process may deform function relevant areas. Therefore, we do not recommend using a brush during the PCB cleaning process.

### Potting and Coating:

- If the product is potted in the customer application, the potting material might shrink or expand during and after hardening. Shrinking could lead to an incomplete seal, allowing contaminants into the components. Expansion could damage the components. We recommend a manual inspection after potting or coating to avoid these effects.

## Important Notes

The following conditions apply to all goods within the product range of Würth Elektronik eiSos GmbH & Co. KG:

### 1. General Customer Responsibility

Some goods within the product range of Würth Elektronik eiSos GmbH & Co. KG contain statements regarding general suitability for certain application areas. These statements about suitability are based on our knowledge and experience of typical requirements concerning the areas, serve as general guidance and cannot be estimated as binding statements about the suitability for a customer application. The responsibility for the applicability and use in a particular customer design is always solely within the authority of the customer. Due to this fact it is up to the customer to evaluate, where appropriate to investigate and decide whether the device with the specific product characteristics described in the product specification is valid and suitable for the respective customer application or not.

### 2. Customer Responsibility related to Specific, in particular Safety-Relevant Applications

It has to be clearly pointed out that the possibility of a malfunction of electronic components or failure before the end of the usual lifetime cannot be completely eliminated in the current state of the art, even if the products are operated within the range of the specifications. In certain customer applications requiring a very high level of safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health it must be ensured by most advanced technological aid of suitable design of the customer application that no injury or damage is caused to third parties in the event of malfunction or failure of an electronic component. Therefore, customer is cautioned to verify that data sheets are current before placing orders. The current data sheets can be downloaded at [www.we-online.com](http://www.we-online.com).

### 3. Best Care and Attention

Any product-specific notes, cautions and warnings must be strictly observed. Any disregard will result in the loss of warranty.

### 4. Customer Support for Product Specifications

Some products within the product range may contain substances which are subject to restrictions in certain jurisdictions in order to serve specific technical requirements. Necessary information is available on request. In this case the field sales engineer or the internal sales person in charge should be contacted who will be happy to support in this matter.

### 5. Product R&D

Due to constant product improvement product specifications may change from time to time. As a standard reporting procedure of the Product Change Notification (PCN) according to the JEDEC-Standard inform about minor and major changes. In case of further queries regarding the PCN, the field sales engineer or the internal sales person in charge should be contacted. The basic responsibility of the customer as per Section 1 and 2 remains unaffected.

### 6. Product Life Cycle

Due to technical progress and economical evaluation we also