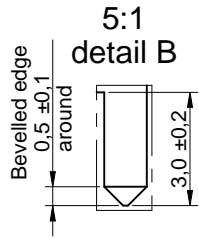
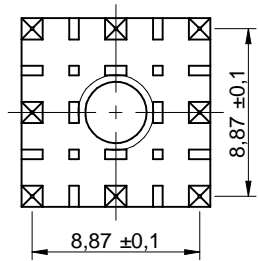
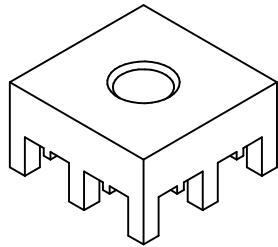
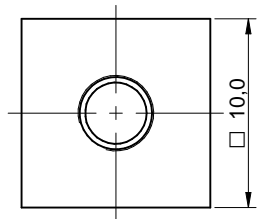
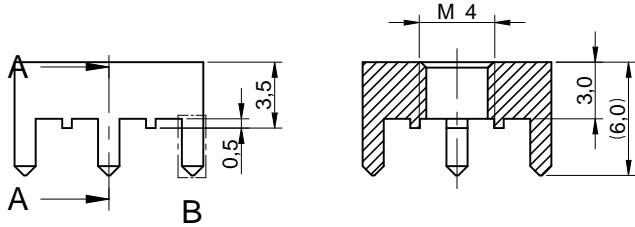


Dimensions: [mm]

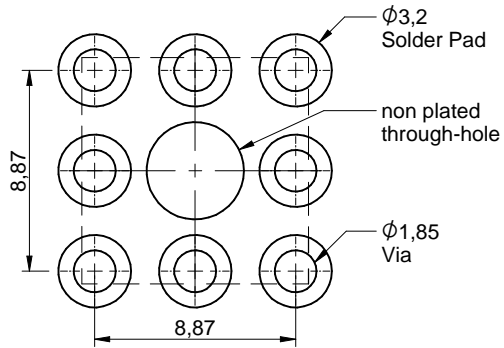


sectional drawing A-A



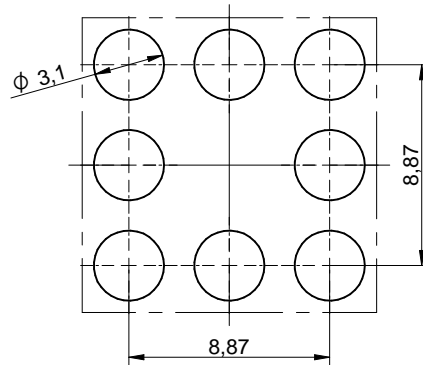
Scale - 2,5:1

Recommended Land Pattern: [mm]



Scale - 3:1

Stencil Suggestion:



Scale - 3:1

Properties:

| Properties | Value | Unit |
|------------------------|----------------------|------|
| Material | Brass | |
| Surface | Tin | |
| Tightening Torque | 1.2 | Nm |
| Solder Cream Thickness | 150 | µm |
| Operating Temperature | -55 °C up to +150 °C | |
| Pins | 8 | |

Electrical Properties:

| Properties | Test conditions | Value | Unit | Tol. |
|--|-----------------|-------|------|--------|
| Rated Current | @ 20 °C | I_R | 85 | A max. |
| Operating current depends on PCB, cable lug and cross section of the cable | | | | |

Packaging Properties:

| | | | |
|-----------------------|---------------|-----|--|
| Packaging | Tape and Reel | | |
| Packaging Unit (Qty.) | Qty. | 600 | |

Würth Elektronik eiSos GmbH & Co. KG
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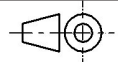


CREATED
DaMa

CHECKED
WiW

GENERAL TOLERANCE
DIN ISO 2768-1m

PROJECTION
METHOD



DESCRIPTION

**REDCUBE THR with internal
through-hole thread WP-THRB**

ORDER CODE

74650094R

REVISION
001.002

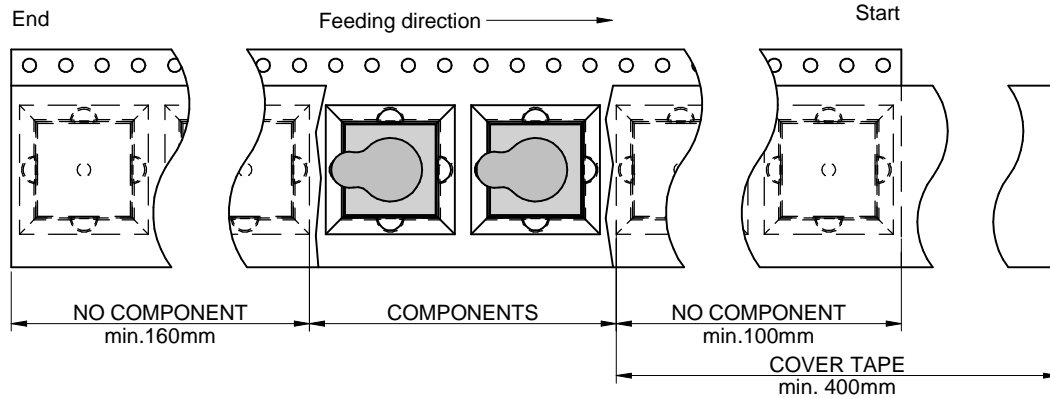
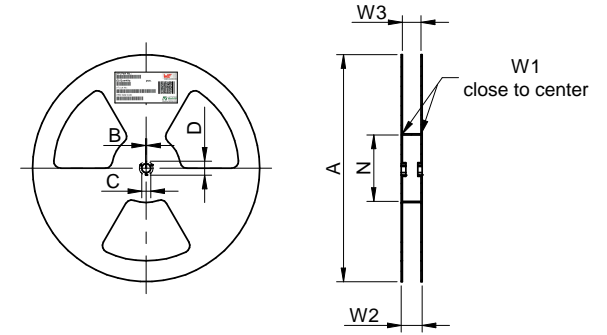
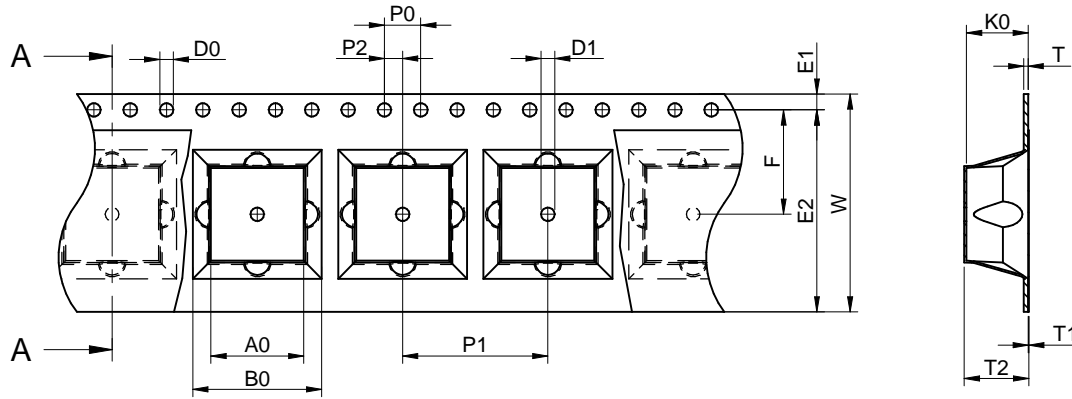
STATUS
Valid

DATE (YYYY-MM-DD)
2017-11-07

BUSINESS UNIT
eiCan

PAGE
1/5

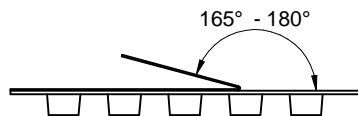
Packaging Specification - Tape and Reel: [mm]



Packaging is referred to the international standard **IEC 60286-3:2013**

| | A0 | B0 | B1 | G | W | T | T1 | T2 | K0 | P0 | P1 | P2 | D0 | D1 | E1 | E2 | F | Tape Type 2a | VPE / packaging unit | |
|--------------------|-----------|-------|-------|-------|------|-------|------|------|------|------|------|-------|------|------|------|------|-------|--------------|----------------------|-----|
| Tolerance | +0,2 | +0,3 | typ. | min. | ±0,3 | max. | max. | +0,2 | +0,2 | ±0,1 | ±0,1 | ±0,1 | +0,1 | typ. | ±0,1 | min. | typ. | | pcs. | |
| Part Number | 74650094R | 10,20 | 14,20 | 20,10 | 0,75 | 24,00 | 0,60 | 0,10 | 7,00 | 6,80 | 4,00 | 16,00 | 2,00 | 1,50 | 1,50 | 1,75 | 22,25 | 11,50 | Polystyrene | 600 |

| | A | B | C | D | N | W1 | W2 | W3 | W3 | |
|-------------------|-------|--------|------|-------|-------|-------|-------|-------|-------|-------|
| Tolerance | ± 2,0 | min. | min. | min. | ± 2,0 | + 2 | max. | min. | max. | |
| Tape width | 24mm | 330,00 | 1,50 | 12,80 | 20,20 | 60,00 | 24,40 | 30,40 | 23,90 | 27,40 |



| | | |
|-------------------|--------------|----------------------|
| | | Pull-of force |
| Tape width | 24 mm | 0,1 N - 1,3 N |

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| | | | |
|---|-----------------|--------------------------------------|------------------------|
| CREATED DaMa | CHECKED WiW | GENERAL TOLERANCE DIN ISO 2768-1m | PROJECTION METHOD |
| DESCRIPTION REDCUBE THR with internal through-hole thread WP-THRU | | ORDER CODE 74650094R | |
| REVISION 001.002 | STATUS Valid | DATE (YYYY-MM-DD) 2017-11-07 | BUSINESS UNIT eiCan |
| | | PAGE 2/5 | |

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 especially required or where a failure of the product is reasonably expected to cause severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Würth Elektronik eiSos GmbH & Co KG products are neither designed nor intended for use in areas such as military, aerospace, aviation, nuclear control, submarine, transportation (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc. Würth Elektronik eiSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

| Profile Feature | | Value |
|--|---------------------|-------------------|
| Preheat Temperature Min ¹⁾ | $T_{s \text{ min}}$ | 150 °C |
| Preheat Temperature Max | $T_{s \text{ max}}$ | 200 °C |
| Preheat Time t_s from $T_{s \text{ min}}$ to $T_{s \text{ max}}$ | 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 | see table |
| Time within 5°C of actual peak tempaure | t_p | 20 - 30 seconds |
| Ramp-down Rate (T_L to T_p) | | 6 °C/ second max. |
| Time 25°C to peak temperature | | 8 minutes max. |

¹⁾ refer to IPC/JEDEC J-STD-020D
refer to IPC/ JEDEC J-STD-020E

Package Classification Reflow Temperature:

| Properties | Volume mm ³ <350 | Volume mm ³ 350-2000 | Volume mm ³ >2000 |
|---|--------------------------------|------------------------------------|---------------------------------|
| PB-Free Assembly Package Thickness < 1.6 mm ¹⁾ | 260 °C | 260 °C | 260 °C |
| PB-Free Assembly Package Thickness 1.6 mm - 2.5 mm | 260 °C | 250 °C | 245 °C |
| PB-Free Assembly Package Thickness ≥ 2.5 mm | 250 °C | 245 °C | 245 °C |

¹⁾ refer to IPC/JEDEC J-STD-020D
refer to IPC/ JEDEC J-STD-020E

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| CREATED DaMa | CHECKED WiW | GENERAL TOLERANCE DIN ISO 2768-1m | PROJECTION METHOD |
| DESCRIPTION REDCUBE THR with internal through-hole thread WP-THRBU | | ORDER CODE 74650094R | |
| REVISION 001.002 | STATUS Valid | DATE (YYYY-MM-DD) 2017-11-07 | BUSINESS UNIT eiCan |
| | | PAGE 3/5 | |

Cautions and Warnings:

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

General:

- This electronic component is designed and developed with the intention for use in general electronics equipment.
- Before incorporating the components into any equipment in the field such as 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 or if there is possibility of direct damage or injury to human body, Würth Elektronik must be asked for a written approval.
- In addition, even electronic component in general electronic equipment, when used in electrical circuits that require high safety, reliability functions or performance, the sufficient reliability evaluation-check for the safety must be performed by the user before usage.
- The electronic component is designed and manufactured to be used within the datasheet specified values.
- Do not use the electronic component outside the datasheet specifications.
- Prevent any damage or scratches on the electronic component.
- Direct mechanical impact to the electronic component shall be prevented.
- 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 specification for standard products do also apply to customer specific products.

Product specific:

Soldering:

The solder profile must comply with the WE technical soldering specification, otherwise this will void the warranty. The via has to be filled completely with solder paste before reflow soldering. Wave soldering is not applicable. Hot-air reflow is recommended. Other soldering methods are not verified and have to be validated by the customer at his own risk.

Cleaning and washing:

REDCUBE WP-THRBU parts are not constructed for washing, so washing can cause malfunction afterwards.

Cleaning agent that are used to clean the customer applications might damage or change the characteristics of the component, body, screw thread and pins.

Please do not submerge our washable products into water or cleaning agents or put them in locations exposed to water completely.

When cleaning by hand (brushing), please do not use excessive force on the electronic component to avoid malfunction afterwards, because customer could deform function relevant areas.

We recommended a solution without organic acid (preserve the plating against corrosion) volatile, without residues and compatible with the plastic.

We recommend to perform tests and to let a part in immersion in the solution 8 to 12 hours and see if there is a degradation.


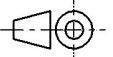
Storage Conditions:

REDCUBE WP-THRBU are considered MSL1 into closed original packaging and are not subject to storage time limits regarding the moisture sensitivity but all products shall be used before the end of the period of 24 months based on the product date-code, if not a 100% solderability can't be warranted.

Handling:

Do not repeatedly operate the REDCUBE WP-THRBU with excessive force. It may damage or deforms the component, body, screw thread or pins which results in malfunction. Violation of the technical product specifications such as exceeding the nominal rated current will result in loss of warranty. The maximum permissible torques must be complied with to prevent mechanical destruction of the electronic component and PCB.

In the case a product requires particular handling precautions, in addition to the general recommendations mentioned here before, these will appear on the product datasheet.

| | | | | | |
|--|--|-----------------|--------------------------------------|--|-------------|
| Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com  | CREATED DaMa | CHECKED WIW | GENERAL TOLERANCE DIN ISO 2768-1m | PROJECTION METHOD  | |
| | DESCRIPTION REDCUBE THR with internal through-hole thread WP-THRBU | | | ORDER CODE 74650094R | |
| | REVISION 001.002 | STATUS Valid | DATE (YYYY-MM-DD) 2017-11-07 | BUSINESS UNIT eiCan | PAGE 4/5 |

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.

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

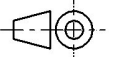

Due to technical progress and economical evaluation we also reserve the right to discontinue production and delivery of products. As a standard reporting procedure of the Product Termination Notification (PTN) according to the JEDEC-Standard we will inform at an early stage about inevitable product discontinuance. According to this we cannot guarantee that all products within our product range will always be available. Therefore it needs to be verified with the field sales engineer or the internal sales person in charge about the current product availability expectancy before or when the product for application design-in disposal is considered. The approach named above does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.

7. Property Rights

All the rights for contractual products produced by Würth Elektronik eiSos GmbH & Co. KG on the basis of ideas, development contracts as well as models or templates that are subject to copyright, patent or commercial protection supplied to the customer will remain with Würth Elektronik eiSos GmbH & Co. KG. Würth Elektronik eiSos GmbH & Co. KG does not warrant or represent that any license, either expressed or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, application, or process in which Würth Elektronik eiSos GmbH & Co. KG components or services are used.

8. General Terms and Conditions

Unless otherwise agreed in individual contracts, all orders are subject to the current version of the "General Terms and Conditions of Würth Elektronik eiSos Group", last version available at www.we-online.com.

| | | | | |
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