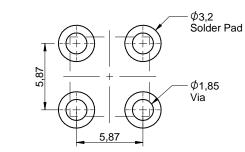
Dimensions: [mm]

5:1

detail B

Recommended Land Pattern: [mm]

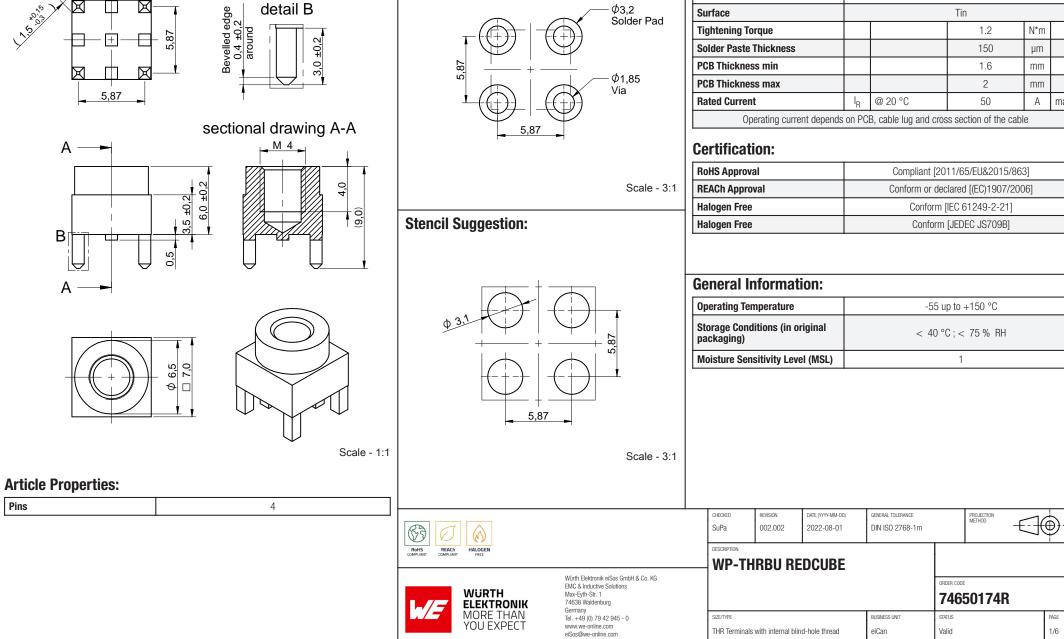


Properties		Test conditions	Value	Unit	Tol.				
Material		Brass							
Surface		Tin							
Tightening Torque			1.2	N*m					
Solder Paste Thickness			150	μm					
PCB Thickness min			1.6	mm					
PCB Thickness max			2	mm					
Rated Current	I _R	@ 20 °C	50	Α	max.				
Operating current depends	on PC	B, cable lug and cros	s section of the cabl	le					
Certification:									

Properties:

RoHS Approval	Compliant [2011/65/EU&2015/863]						
REACh Approval	Conform or declared [(EC)1907/2006]						
Halogen Free	Conform [IEC 61249-2-21]						
Halogen Free	Conform [JEDEC JS709B]						
Halogen Free	Conform [IEC 61249-2-21]						

Operating Temperature	-55 up to +150 °C
Storage Conditions (in original packaging)	< 40 °C; < 75 % RH
Moisture Sensitivity Level (MSL)	1



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 Wurth Elektronik elSos GmbH & Co KG must be information intended for use in equipment where a higher safety standard and reliability 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 Wurth Elektronik elSos GmbH & Co KG must be information intended for use in equivalent 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 Wurth Elektronik elSos GmbH & Co KG must be information network etc.. Wurth Elektronik elSos GmbH & Co KG must be information intended to use is electronic component which is used in electrical circuits there adjust high standard is especially executed an electronic component which is used in electrical circuits there are electrical circuits ther

Packaging Specification - Tape: [mm]

А

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Tolerance

Part Number

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K0 _D1 D0 Т W3. Ξ θ $\oplus \oplus \oplus$ ⊢⊕ ∣ Φ ΦΦ θ $\oplus \oplus$ θ Ð $\oplus \oplus$ Φ ⊕ W1 close to center L1 . Ш ≥ Æ (∢ z С A0 P1 T1 B0 T2 W2 Start End detail B Feeding direction -Cover Tape 6 0 0 0 0 0 0 0 0 0 0 0 0 Ο 0 0 b 00 0 B Chip Cavity Sprocket Hole ()()Embossment NO COMPONENT COMPONENTS NO COMPONENT min.160mm min.100mm COVER TAPE min. 400mm Packaging is reffered to the international standard IEC 60286-3:2013 W1 **W**3 **W3** Tolerance +20± 2,0 + 2 max. min. max. min min min T1 T2 K0 P0 P1 P2 D0 D1 E1 E2 Tape Type 2a VPE / packaging unit A0 **B**1 min. ±0,3 max. max. +0,2 +0,2 ±0,1 ±0,1 ±0,1 +0,1 typ. ±0,1 min. typ. Tape width 24mm 330.00 1 50 12 80 20.20 60.00 24 40 30.40 23.90 27 40 +0.2 +0.3 tvn ncs 7.20 14.20 74650174B CHECKED GENERAL TOLERANCE PROJECTION METHOD REVISION DATE (YYYY-MM-DD) GЭ SuPa 002.002 2022-08-01 DIN ISO 2768-1m 165° - 180° DESCRIPTION RoHS REACh COMPLIANT HALOGEN WP-THRBU REDCUBE Würth Elektronik eiSos GmbH & Co. KG ORDER CODE EMC & Inductive Solutions WÜRTH Max-Eyth-Str. 1 74650174R 74638 Waldenburg **ELEKTRONIK** Germany MORE THAN

Packaging Specification - Reel: [mm]

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PAGE

2/6

This electronic component has been designed and developed for usage in general electronic equipment only. This product is neasonably expected to cause severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Würth Elektronik eiSos GmbH A Co KG products are nebber observed by sensitive and beinded with a servention and the s

YOU EXPECT

Pull-of force

0,1 N - 1,3 N

24 mm

Tape width

Tel. +49 (0) 79 42 945 - 0

www.we-online.com

eiSos@we-online.com

SIZE/TYPE

THR Terminals with internal blind-hole thread

BUSINESS UNIT

eiCan

STATUS

Valid

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 $\rm t_s$ from $\rm T_{smin}$ to $\rm T_{smax}$	t _s	60 - 120 seconds
Ramp-up Rate (T _L to T _P)		3 °C/ second max.
Liquidous Temperature	TL	217 °C
Time t_L maintained above T_L	tL	60 - 150 seconds
Peak package body temperature	Т _р	$T_p \le T_c$, 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 ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
PB-Free Assembly I Package Thickness < 1.6 mm	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 I Package Thickness > 2.5 mm	250 °C	245 °C	245 °C

refer to IPC/ JEDEC J-STD-020E

	Wirth Elektronik elSos GmbH & Co. KG Würth Elektronik elSos GmbH & Co. KG ELEKTRONIK Wirth Elektronik elSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany		CHECKED SUPa	REVISION 002.002	DATE (YYYY-MM-DD) 2022-08-01	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD		€-	
						_	ORDER CODE	50174R			
	. / -	MORE THAN YOU EXPECT	Germany TeL, -49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	SIZE/TYPE THR Terminals	with internal blin	d-hole thread	BUSINESS UNIT eiCan	status Valid		1	PAGE 3/6

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 and rel

Classification Wave Soldering Profile:



---- max temperature procedure

Classification Wave Soldering Profile:

Profile Feature		Pb-Free Assembly	Sn-Pb Assembly		
Preheat Temperature Min	T _{s min}	100 °C	100 °C		
Preheat Temperature Typical	T _{s typical}	120 °C	120 °C		
Preheat Temperature Max	T _{s max}	130 °C	130 °C		
Preheat Time $\rm t_s$ from $\rm T_{smin}$ to $\rm T_{smax}$	t _s	70 seconds	70 seconds		
Ramp-up Rate	ΔT	150 °C max.	150 °C max.		
Peak Temperature	Peak Temperature		235 °C - 260 °C		
Time of actual peak temperature	tp	max. 10 seconds max. 5 seconds each wave	max. 10 seconds max. 5 seconds each wave		
Ramp-down Rate, Min		~ 2 K/ second	~ 2 K/ second		
Ramp-down Rate, Typical	Ramp-down Rate, Typical		~ 3.5 K/ second		
Ramp-down Rate, Max		~ 5 K/ second	~ 5 K/ second		
Time 25 °C to 25 °C		4 minutes	4 minutes		

refer to EN61760-1:2006

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	COMPLIANT FREE		WP-THRBU REDCUBE								
Würth Elektronik elšos GmbH & Co. KG EMC & Inductive Solutions ELEKTRONIK		EMC & Inductive Solutions Max-Eyth-Str. 1					ORDER CODE	50174R			
	DRE THAN U EXPECT	elmany Tel. +49 (0) 79 42 945 - 0 www.we-online.com elSos@we-online.com	SIZE/TYPE THR Terminals	with internal blin	d-hole thread	BUSINESS UNIT eiCan	status Valid		1	PAGE 4/6	

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Cautions and Warnings:

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

General:

- This electromechanical component was 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.
- Electromechanical components that will be used in safety-critical or high-reliability applications, should be pre-evaluated by the customer.
- The 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.
- 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.
- Würth Elektronik products are qualified according to international standards. Würth Elektronik does not warrant any customer qualified
 product characteristics beyond Würth Elektroniks' specifications, for its validity and sustainability over time.

Product specific:

Soldering:

- The solder profile must comply with the Würth Elektronik technical soldering specification. All other profiles will void the warranty. Surface discoloration due to reflow processing is permitted.
- Wave soldering is not applicable. Reflow soldering is recommended.

Follow all instructions in the datasheet, especially:

Violation of the technical product specifications such as exceeding the nominal rated current will result in loss of warranty.

Storage Conditions:

- A storage of Würth Elektronik products for longer than 12 months is not recommended. Therefore, all products shall be used within the
 period of 12 months based on the day of shipment, if not a 100% solderability can't be warranted.
- Do not expose the components to direct sunlight.

- The storage conditions in the original packaging are defined according to DIN EN 61760-2.
- The storage conditions stated in the original packaging apply to the storage time and not to the transportation time of the components.

Packaging:

 The packaging specifications apply only to purchase orders comprising whole packaging units. If the ordered quantity exceeds or is lower than the specified packaging unit, packaging in accordance with the packaging specifications cannot be ensured.

Handling:

- The maximum permissible torgues must be complied with to prevent mechanical destruction of the component and PCB.
- Blind hole thread: the dimension of the thread length in the drawing (page 1) defines the minimum screw-in depth of a screw.
- External thread: the dimension of the shaft length in the drawing (page 1) includes the thread run-out. The usable thread length is defined by DIN 76-1:2016-08 (Table 1, a1).

These cautions and warnings comply with the state of the scientific and technical knowledge and are believed to be accurate and reliable. However, no responsibility is assumed for inaccuracies or incompleteness.

		CHECKED SuPa	REVISION 002.002	DATE (YYYY-MM-DD) 2022-08-01	GENERAL TOLERANCE DIN ISO 2768-1m			96) -		
	Roh5 REACH HALOGEN COMPLIANT COMPLIANT FREE		WP-THRBU REDCUBE								
	Würth Elektronik elSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Sr. 1 74638 Waldenburg Germany						ORDER CODE	50174R			
		MORE THAN YOU EXPECT	Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	SIZE/TYPE THR Terminals	with internal blin	d-hole thread	BUSINESS UNIT eiCan	status Valid		- 1	PAGE 5/6

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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 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.

		CHECKED SuPa	REVISION 002.002	DATE (YYYY-MM-DD) 2022-08-01	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	$-\bigcirc$	€-	
RoHS COMPLIANT	COMPLIANT CAMPLIANT FREE Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions WURTH Max-Eyth-Str. 1		WP-THRBU REDCUBE							
							ORDER CODE	50174R		
	MORE THAN YOU EXPECT	Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com elSos@we-online.com	SIZE/TYPE THR Terminals	with internal blin	d-hole thread	BUSINESS UNIT eiCan	status Valid		1	PAGE 6/6

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