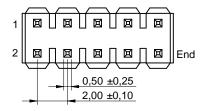
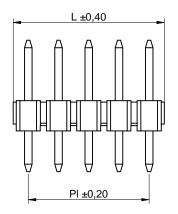
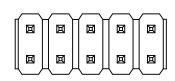
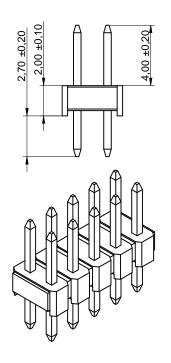
# **Dimensions: [mm]**

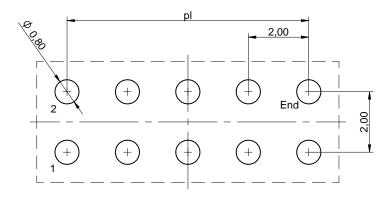








# **Recommended Hole Pattern: [mm]**



General tolerance ±0,05

## **Pattern Properties:**

Properties		Value	Unit
Pin to Pin (Middle)	p <sub>l</sub>	8	mm

# **Article Properties:**

Properties		Value	Unit
Pins		10	
Pin to Pin (Middle)	P <sub>I</sub>	8	mm
Length	L	10	mm

Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions

Max-Eyth-Str. 1 74638 Waldenburg Germany Tel. +49 (0) 79 42 945 - 0

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DaMa	CHECKED	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	
DESCRIPTION			-		

2.00mm THT Straight Dual Pin Header WR-PHD

STATUS

Valid

REVISION

002.000

ORDER CODE
62001021121

DATE (YYYY-MM-DD)
2017-07-03

eiCan

1/6

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 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 Worth Elektronik elSos GmbH & Co KG must be informed in the intervent 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 start require high safety and reliability functions or performanced on every electronic component which is used in electrical circuits start require high safety and reliability functions or performanced on every electronic component which is used in electrical circuits start require high safety and reliability functions or performanced on every electronic component which is used in electrical circuits start require high safety and reliability functions or performanced on every electronic component which is used in exercise the parties of the product is reasonably expected to cause severe personal injury or death, unless the parties of the product is not authorized for use in equipment of the product is reasonably expected to cause severe personal injury or death, unless the parties of the product is not authorized for use in equipment where a higher electronic equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in equipment of the product is not authorized for use in e

# **Article Properties:**

Pins	P <sub>I</sub>	L	Order Code
4	2 mm	4 mm	62000421121
6	4 mm	6 mm	62000621121
8	6 mm	8 mm	62000821121
10	8 mm	10 mm	62001021121
12	10 mm	12 mm	62001221121
14	12 mm	14 mm	62001421121
16	14 mm	16 mm	62001621121
18	16 mm	18 mm	62001821121
20	18 mm	20 mm	62002021121
22	20 mm	22 mm	62002221121
24	22 mm	24 mm	62002421121
26	24 mm	26 mm	62002621121
28	26 mm	28 mm	62002821121
30	28 mm	30 mm	62003021121
32	30 mm	32 mm	62003221121
34	32 mm	34 mm	62003421121
36	34 mm	36 mm	62003621121
38	36 mm	38 mm	62003821121
40	38 mm	40 mm	62004021121
42	40 mm	42 mm	62004221121
44	42 mm	44 mm	62004421121
46	44 mm	46 mm	62004621121
48	46 mm	48 mm	62004821121
50	48 mm	50 mm	62005021121
52	50 mm	52 mm	62005221121
54	52 mm	54 mm	62005421121
56	54 mm	56 mm	62005621121
58	56 mm	58 mm	62005821121

60	58 mm	60 mm	62006021121
62	60 mm	62 mm	62006221121
64	62 mm	64 mm	62006421121
66	64 mm	66 mm	62006621121
68	66 mm	68 mm	62006821121
70	68 mm	70 mm	62007021121
72	70 mm	72 mm	62007221121
74	72 mm	74 mm	62007421121
76	74 mm	76 mm	62007621121
78	76 mm	78 mm	62007821121
80	78 mm	80 mm	62008021121

## **Kind Properties:**

Properties		Value			
Standard Polarities 1)		04;06;08;10;16;20;24;28;32;40;44			
Pitch	Р	2			
Quality Class		3 as per CECC 75 301-802			
Rows		Dual			
Gender		Male			

<sup>1)</sup> Delivery ex stock for standard polarities, non standard have extended leadtimes and MOQ

## **Material Properties:**

Insulator Material	PA9T			
Insulator Flammability Rating	UL94 V-0			
Insulator Color	Black			
Contact Material	Copper Alloy			
Contact Plating	Gold			
Contact Type	Stamped			

CREATED CHECKED GENERAL TOLERANCE PROJECTION METHOD Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions GM DaMa DIN ISO 2768-1m Max-Eyth-Str. 1 74638 Waldenburg 2.00mm THT Straight Dual Pin Tel. +49 (0) 79 42 945 - 0 **Header WR-PHD** ORDER CODE www.we-online.com 62001021121 eiSos@we-online.com DATE (YYYY-MM-DD) BUSINESS UNIT REVISION STATUS PAGE 002.000 Valid 2/6 2017-07-03 eiCan **WÜRTH ELEKTRONİK** 

## **General Properties:**

Operating Temperature	-40 °C up to +105 °C
Compliance	Lead free / RoHS

## **Electrical Properties:**

Properties	Test conditions		Value	Unit	Tol.
Rated Current		I <sub>R</sub>	2	А	max.
Working Voltage			200	V (AC)	
Withstanding Voltage	1 min		500	V (AC)	
Contact Resistance		R	20	mΩ	max.
Insulation Resistance		R <sub>ISO</sub>	1000	ΜΩ	min.

## Standard:

UL Approval	E323964

## **Packaging Properties:**

Packaging	Bag
Packaging Unit (Qty.)	1000

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CREATED CHECKED GENERAL TOLERANCE DIN ISO 2768-1m

DESCRIPTION

2.00mm THT Straight Dual Pin Header WR-PHD

STATUS

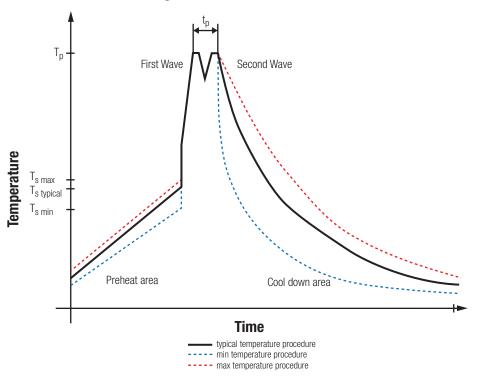
REVISION

ORDER CODE
62001021121

DATE (YYY-MM-DD) BUSINESS UNIT PAGE

002.000 Valid 2017-07-03 eiCan 3/6
se severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Würth Elektronik eiSos GmbH

## **Classification Wave Soldering Profile:**



## **Classification Wave Soldering Profile:**

Profile Feature		Pb-Free Assembly	Sn-Pb Assembly
Preheat Temperature Min 1)	T <sub>s min</sub>	100 °C	100 °C
Preheat Temperature Typical	T <sub>s typical</sub>	120 °C	120 °C
Preheat Temperature Max	T <sub>s max</sub>	130 °C	130 °C
Preheat Time $t_s$ from $T_{s min}$ to $T_{s max}$	t <sub>s</sub>	70 seconds	70 seconds
Ramp-up Rate	ΔΤ	150 °C max.	150 °C max.
Peak temperature	T <sub>p</sub>	250 °C - 260 °C	235 °C - 260 °C
Time of actual peak temperature	t <sub>p</sub>	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		~ 3.5 K/ second	~ 3.5 K/ second
Ramp-down Rate, Max		~ 5 K/ second	~ 5 K/ second
Time 25°C to 25°C		4 minutes	4 minutes

<sup>1)</sup> refer to EN61760-1:2006 refer to EN61760-1:2006

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4/6

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## **Cautions and Warnings:**

# The following conditions apply to all goods within the product services of the Connectors 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,
  Wurth 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 connector is designed and manufactured to be used within the datasheet specified values.
- Do not use the connector outside the datasheet specifications.
- Prevent any damage or scratches on the connector, especially on the actuator.
- Direct mechanical impact to the product shall be prevented (e.g overlapping of the PCB's).
- 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.
- The Connectors are designed to be used along with Würth Elektronik counterparts and tools. Würth Elektronik cannot insure the
  reliability of these components while being used with other products.

### **Product Specific:**

#### Soldering:

- The solder profile must comply with the WE technical soldering specification, otherwise this will void the warranty.
- Other soldering methods are not verified and have to be validated by the customer at his own risk.

#### Cleaning and Washing:

- 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, nins and termination
- Please do not submerse 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 our connectors 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:

 The Connectors are considered MSL1 into closed original packaging and are not subject to storage time limits regarding the moisture sensivity but all products shall be used before the end of the period of 12 months based on the products date code, if not 100% solderability can't be warranted.

#### Handling:

- Do not repeatedly operate the connector with excessive force. It may damage or deforms the contact dome which results in malfunction.
- 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.



## **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.

