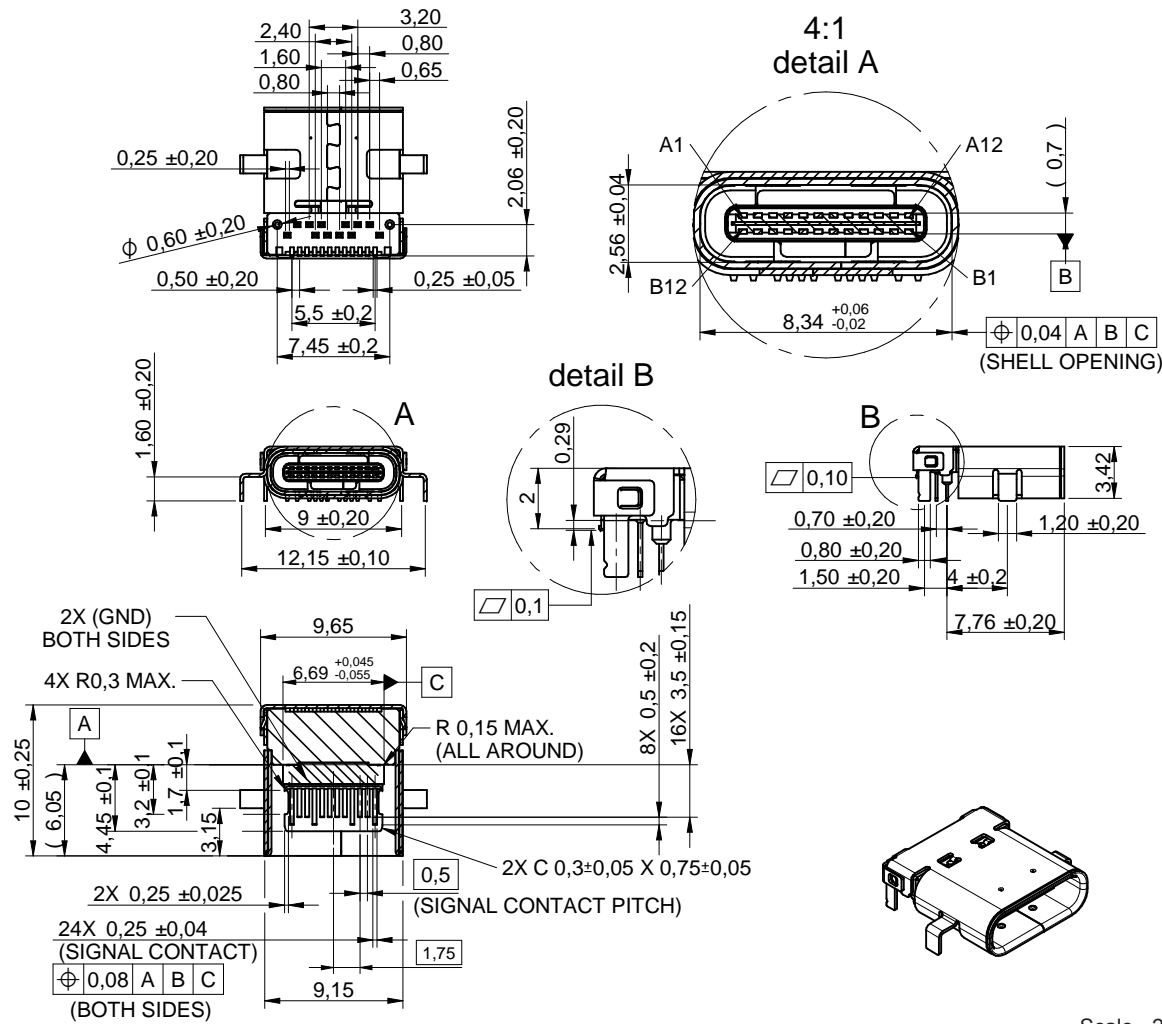
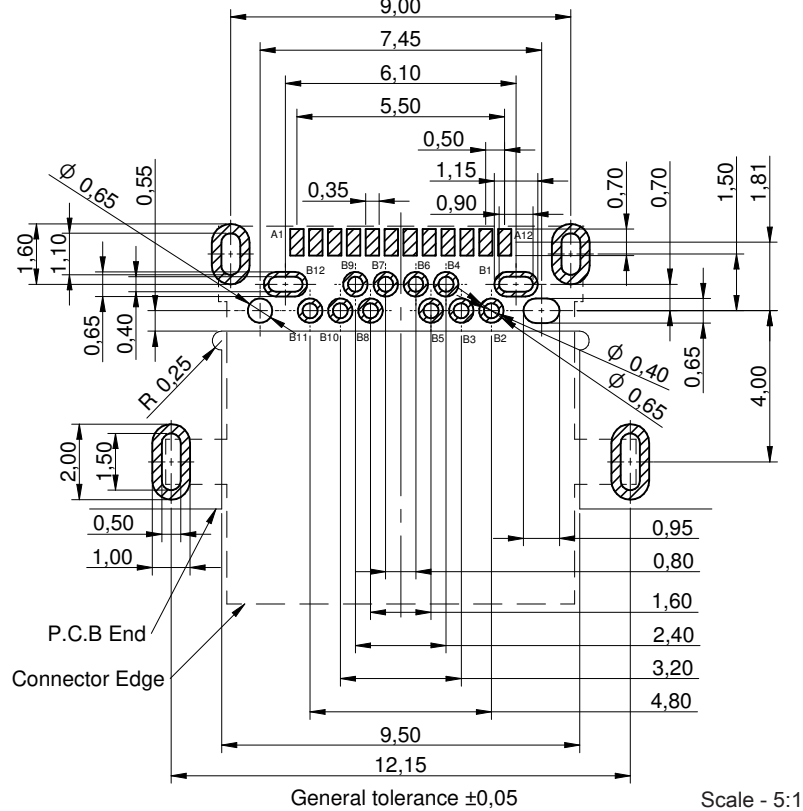


Dimensions: [mm]



Recommended Land Pattern: [mm]



Article Properties:

Properties	Value	Unit
PCB Thickness ¹⁾	1.6	mm
Pins	24	

¹⁾ Note: This PCB thickness is recommended for optimal use. Processing temperature has to be adapted to respect JEDEC requirements if using other panel thicknesses.

Würth Elektronik eiSos GmbH & Co. KG
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Tel. +49 (0) 79 42 945 - 0
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eiSos@we-online.com

CHECKED FPe	REVISION 001.001	DATE (YYYY-MM-DD) 2019-09-04	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD
DESCRIPTION WR-COM USB 3.1 Horizontal SMT/THR				ORDER CODE 632723130112
SIZE/TYPE Type C, Mid-Mount		BUSINESS UNIT eiCan	STATUS Valid	PAGE 1/8

Pin Assignment:

Pin Number	Signal Name	Pin Number	Signal Name
A1	GND	B12	GND
A2	SSTXp1	B11	SSRXp1
A3	SSTXn1	B10	SSRXn1
A4	VBUS	B9	VBUS
A5	CC	B8	SBU2
A6	Dp1	B7	Dn2
A7	Dn1	B6	Dp2
A8	SBU1	B5	VCONN
A9	VBUS	B4	VBUS
A10	SSRXn2	B3	SSTXn2
A11	SSRXp2	B2	SSTXp2
A12	GND	B1	GND
Shell	Shield		

Kind Properties:

Durability	10 000 Mating cycles
Gender	Receptacle
Type	Horizontal

Material Properties:

Insulator Material	LCP
Insulator Flammability Rating	UL94 V-0
Insulator Color	Black
Contact Material	Copper Alloy
Contact Plating ¹⁾	Gold over Nickel
Shielding Material	Stainless Steel
Shielding Plating	Nickel
Contact Type	Stamped

¹⁾ Mating side / Solder side

General Information:

Operating Temperature	-40 up to +85 °C
-----------------------	------------------

Electrical Properties:

Properties		Test conditions	Value	Unit	Tol.
Rated Current	I _R		5	A	
Working Voltage			20	V (DC)	
Withstanding Voltage		1 min.	100	V (AC)	min.
Contact Resistance	R		40	mΩ	max.
Insulation Resistance	R _{ISO}		100	MΩ	min.

Certification:

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]
USB Approval / TID number	2035

Mechanical Properties:





Insertion Force	5 N-20 N
Extraction Force	8 N-20 N


Extraction Force: Initial 8 to 20N
After durability test: 6 to 20N

Packaging Properties:

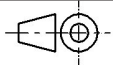
Packaging	Tape and Reel
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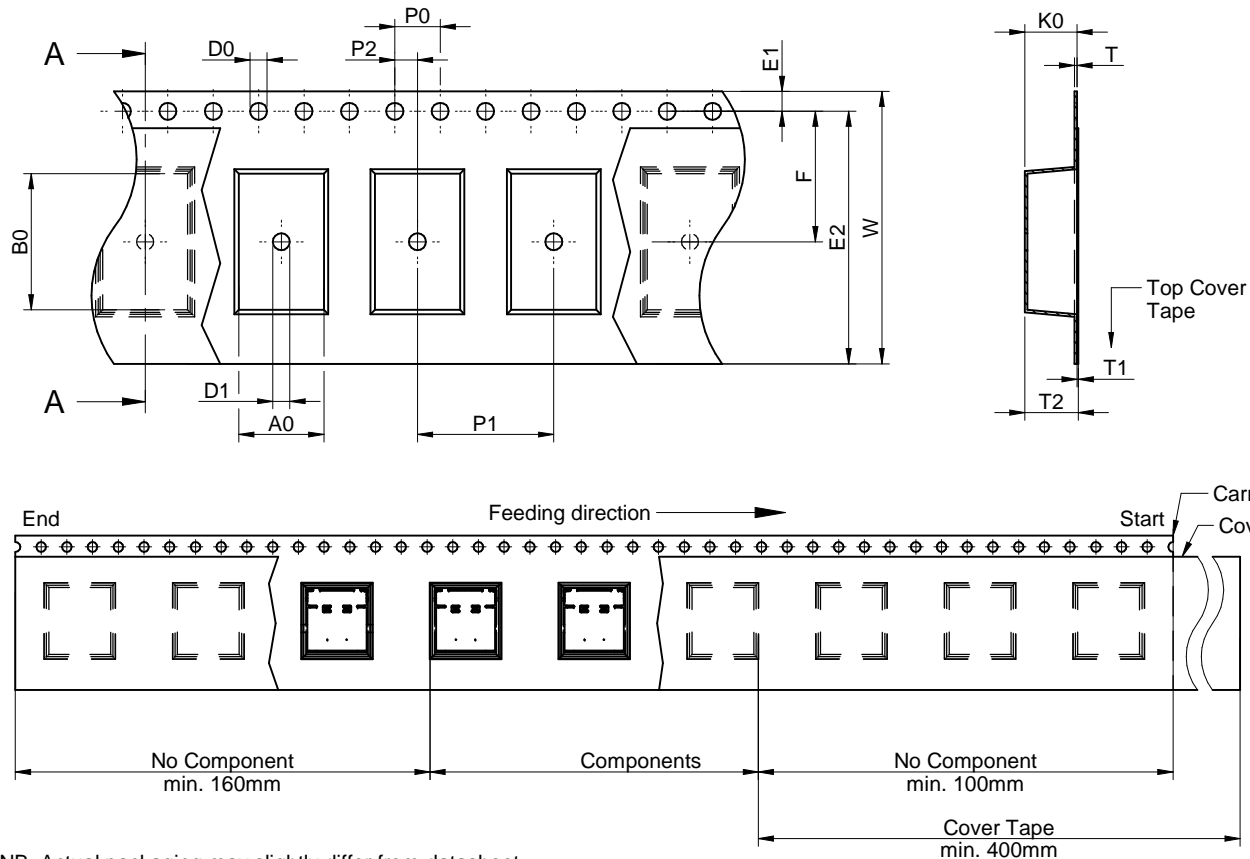




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SIZE/TYPE Type C, Mid-Mount			BUSINESS UNIT eiCan	STATUS Valid
				PAGE 2/8

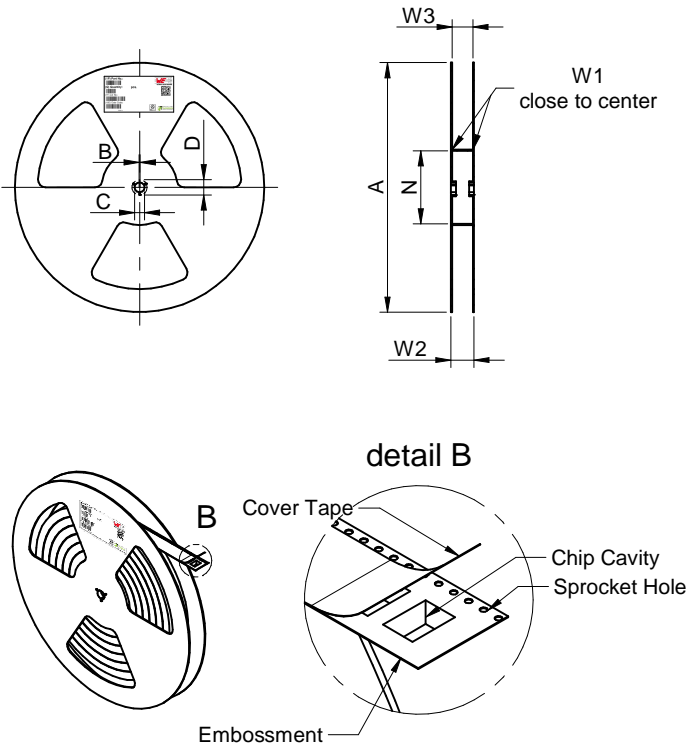
Packaging Specification - Tape and Reel: [mm]



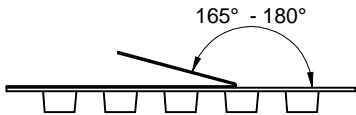
NB: Actual packaging may slightly differ from datasheet

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

A0	B0	W	T	T1	T2	K0	P0	P1	P2	D0	D1	E1	E2	F	Tape Type 2a	VPE / packaging unit
typ.	typ.	+0,3/-0,1	max.	max.	max.	typ.	±0,1	±0,1	±0,1	+0,1/-0,0	min.	±0,1	min.	±0,1		pcs.
9,53	10,32	24,0	0,35	0,1	4,15	4,15	4,0	20,0	2,0	1,5	1,5	1,75	22,25	11,5	Polystyrene	800



A (mm)	B (mm)	C (mm)	D (mm)	N (mm)	W1 (mm)	W2 (mm)	W3 (mm)	W3 (mm)	Material
± 2,0	min.	min.	min.	min.	+ 2,0	max.	min.	max.	
330,00	1,50	12,80	20,20	60,00	24,40	30,40	23,90	27,40	Polystyrene



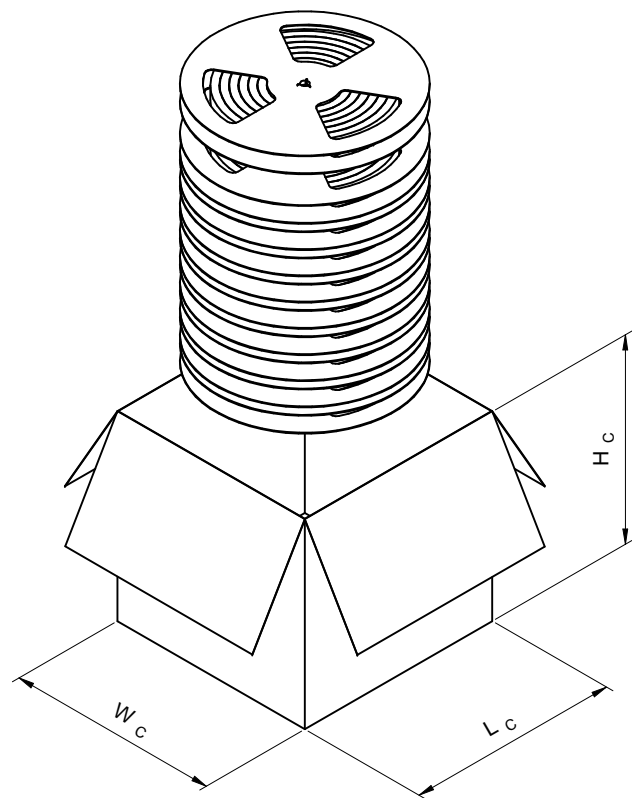
Tape width	24 mm	Pull-of force
		0,1 N - 1,3 N



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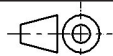
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SIZE/TYPE Type C, Mid-Mount		BUSINESS UNIT eiCan	STATUS Valid	PAGE 3/8

Packaging Specification - Reel in Carton: [mm]



NB: Actual packaging may slightly differ from datasheet

L _C (mm)	W _C (mm)	H _C (mm)	No. of reel outer packaging	Packaging Unit	Material
typ.	typ.	typ.	reel.	pcs.	
350	350	340	10	8000	Paper

<div><div></div><div></div></div>		CHECKED FPe		REVISION 001.001	DATE (YYYY-MM-DD) 2019-09-04	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
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Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

Profile Feature		Value
Preheat Temperature Min ¹⁾	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	see table
Time within 5°C of actual peak temperaure	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:

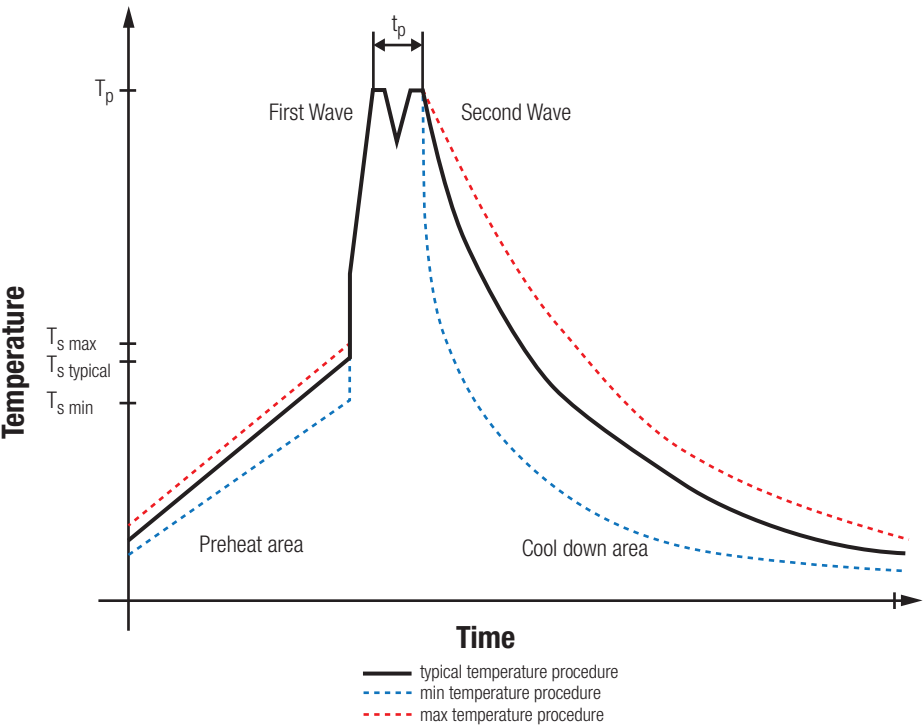
Properties	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
PB-Free Assembly I Package Thickness < 1.6 mm ¹⁾	260 °C	260 °C	260 °C
PB-Free Assembly I Package Thickness 1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
PB-Free Assembly I Package Thickness ≥ 2.5 mm	250 °C	245 °C	245 °C

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

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		DESCRIPTION WR-COM USB 3.1 Horizontal SMT/THR				ORDER CODE 632723130112
		SIZE/TYPE Type C, Mid-Mount	BUSINESS UNIT eiCan	STATUS Valid	PAGE 5/8	

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Classification Wave Soldering Profile:



Classification Wave Soldering Profile:

Profile Feature		Pb-Free Assembly	Sn-Pb Assembly
Preheat Temperature Min ¹⁾	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 t _s from T _{s min} to T _{s max}	t _s	70 seconds	70 seconds
Ramp-up Rate	Δ T	150 °C max.	150 °C max.
Peak Temperature	T _p	250 °C - 260 °C	235 °C - 260 °C
Time of actual peak temperature	t _p	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

¹⁾ refer to EN61760-1:2006
refer to EN61760-1:2006

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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.


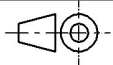


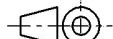

Storage Conditions:

- A storage of Würth Elektronik products for longer than 12 months is not recommended. Within other effects, the terminals may suffer degradation, resulting in bad solderability. Therefore, all products shall be used within the period of 12 months based on the day of shipment.
- Do not expose the components to direct sunlight.
- The storage conditions in the original packaging are defined according to DIN EN 61760-2.

Handling:

- Do not repeatedly operate the component with excessive force. It may damage or deform the component resulting 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.

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.

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		SIZE/TYPE Type C, Mid-Mount		BUSINESS UNIT eiCan		STATUS Valid	PAGE 7/8

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


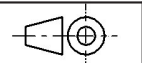

Due to technical progress and economical evaluation we also reserve the right to discontinue production and delivery of products. As a standard reporting procedure of the Product Termination Notification (PTN) according to the JEDEC-Standard we will inform at an early stage about inevitable product discontinuance. 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.

		CHECKED FPe	REVISION 001.001	DATE (YYYY-MM-DD) 2019-09-04	GENERAL TOLERANCE DIN ISO 2768-1m	PROJECTION METHOD 
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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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