

Properties	Value	Unit
PCB Thickness ¹⁾	0.8	mm
Pins	22	

BaBo 001.001 2020-06-04 DIN ISO 2768-1m 3 Ø Яľ DESCRIPTION RoHS REACH WR-COM USB 3.1 Plug Horizontal Würth Elektronik eiSos GmbH & Co. KG ORDER CODE EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg 632712000011 Germany Tel. +49 (0) 79 42 945 - 0 SIZE/TYPE BUSINESS UNIT STATUS www.we-online.com WÜRTH ELEKTRONIK Type C eiCan Valid eiSos@we-online.com

PAGE

1/7

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.

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 Warth Elektronik elSos GmbH & Co KG products are neither designed nor intended 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 Warth Elektronik elSos GmbH & Co KG must be informed on every electronic component 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 astel electronic.

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		
A7	Dn1		
A8	SBU1	B5	VCONN
A9	VBUS	B4	VBUS
A10	SSRXn2	B3	SSTXn2
A11	SSRXp2	B2	SSTXp2
A12	GND	B1	GND
Shell	Shield		

General Information:

Operating Temperature

-25 up to +105 °C

Electrical Properties:

Properties		Test conditions	Value	Unit	Tol.
Rated Current	I _R		5	A	max.
Working Voltage			20	V (DC)	
Withstanding Voltage		1 min	100	V (AC)	
Contact Resistance	R		30	mΩ	max.
Insulation Resistance	R _{ISO}		1000	MΩ	min.

Certification:

RoHS Approval	Compliant [2011/65/EU&2015/863]
REACh Approval	Conform or declared [(EC)1907/2006]
UL Approval	E323964
USB Approval / TID number	520000114

Kind Properties:

Durability	10 000 Mating cycles			
Connector Type	USB 3.1 Type C			
Gender	Plug			
Туре	Horizontal			

Material Properties:

Insulator Material	LCP
Insulator Flammability Rating	UL94 V-0
Insulator Color	Black
Contact Material	Copper Alloy
Contact Plating ¹⁾	2µ" Gold over 30µ" Pd-Ni
Contact Type	Stamped

¹⁾ Mating side / Solder side

Mechanical Properties:

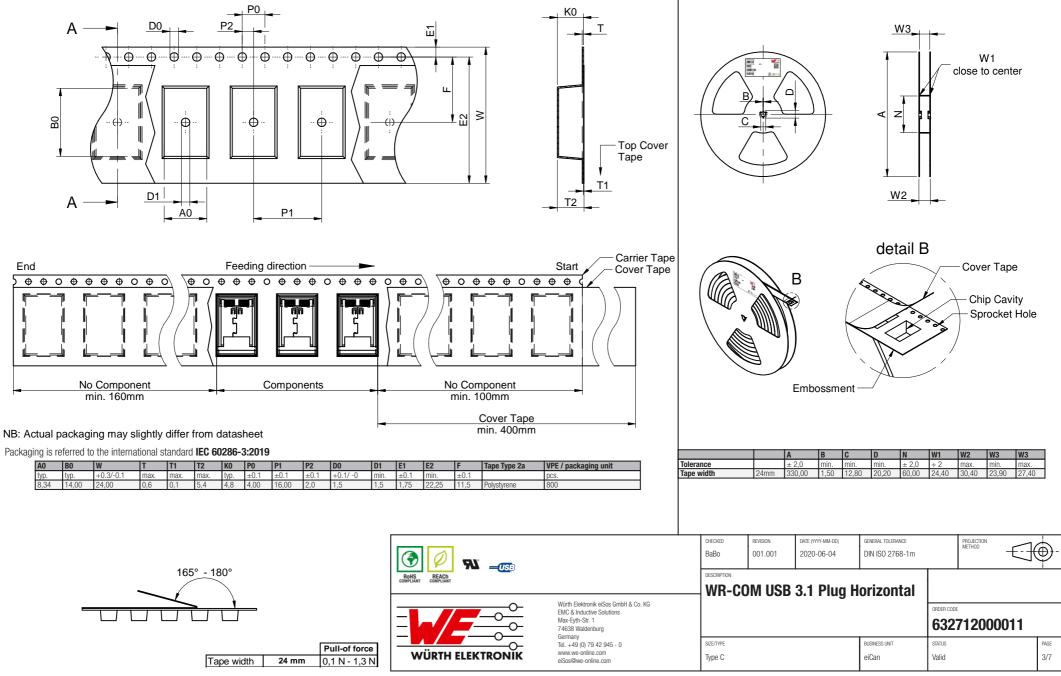
· ·	
Insertion Force	5 N-20 N
Extraction Force	8 N-20 N

Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg			-		ORDER CODE	12000011	
	Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com elSos@we-online.com	size/type Type C		BUSINESS UNIT eiCan	status Valid		PAGE 2/7

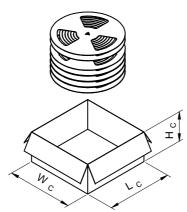
This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment where a higher safety standard and reliability standard is especially required or where a failure of the product is not authorized for use in equipment 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 Wirth Elektronik elSos 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 therefore 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, before the design-in stage, in addition, sufficient reliability transportation isgnal, disaster prevention, medical, public information network etc.. Wirth Elektronik elSos 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 the require high safety and reliability for the safety and reliability for the reliability for the safety and reliability for the



Packaging Specification - Reel: [mm]



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 Warth Elektronik elSos GmbH & Co Kg products are netliner designed nor intended for use in equipment which is used in elevation intended 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 Warth Elektronik elSos GmbH & Co KG must be informed on every electronic component which is used in elevatival crucial the intent of such usage before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every elevationic component which is used in elevatival crucial that require high astel elevatival require high astel elevatival to cause elevatival elevatival that and the elevatival elev



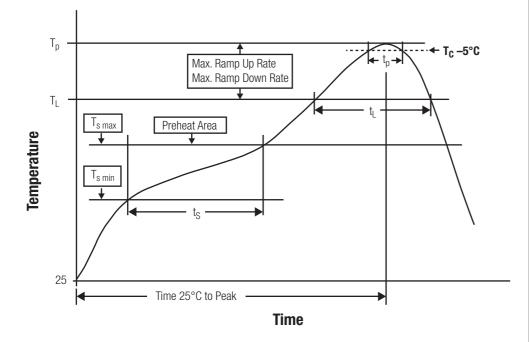
NB: Actual packaging may slightly differ from datasheet

L _C (mm)	W _C (mm)	H _C (mm)	No. of reel outer packaging	Packaging Unit	Material
typ.	typ.	typ.	reel.	pcs.	
350	350	160	5	4000	Paper

N N		CHECKED BaBo DESCRIPTION	REVISION 001.001	DATE (YYYY-MM-DD) 2020-06-04	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	⊕-
	Würth Elektronik elSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg		om USB	3.1 Plug H	orizontal	ORDER CODE	712000011	
	Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	size/type Type C			BUSINESS UNIT eiCan	status Valid		PAGE 4/7

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 elSos GmbH & Co KG products are neither designed nor intended for use in areas such as military, aerospace, aviation, nuclear control, submarine, transportation signal, disaster prevention, medical, public information network etc.. Würth Elektronik elSos 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 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 \mathbf{t}_{L} maintained above \mathbf{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.		

¹⁾ refer to IPC/JEDEC J-STD-020D

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 $< 1.6 \text{ mm}^{1)}$	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

		CHECKED BaBo	revision 001.001	DATE (YYYY-MM-DD) 2020-06-04	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	
		DESCRIPTION	M USB	3.1 Plug H				
Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg				0		ORDER CODE	/12000011	
	Germany Tel. +49 (0) 79 42 945 - 0 www.we-online.com elSos@we-online.com	SIZE/TYPE Type C				status Valid	page 5/7	

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 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 elSos GmbH & Co KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability valuation checks for safety must be performed on every electronic component which is used in electrical iccutions or performance.

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 Elektroniks' 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.
- The storage conditions stated in the original packaging apply to the storage time and not to the transportation time of the components.

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.

ROHS ROHSLAAT REACH COMPLANT COMPLANT		CHECKED BaBo	revision 001.001	DATE (YYYY-MM-DD) 2020-06-04	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD		€-
		WR-COM USB 3.1 Plug Horizontal							
	Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germany					ORDER CODE	712000	011	
	elinariy Tel. +49 (0) 79 42 945 - 0 www.we-online.com eiSos@we-online.com	size/type Type C			BUSINESS UNIT eiCan	status Valid		1	PAGE 6/7

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 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 Wirth Elektronik elSos 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 incurvite and reliability evaluation checks for safety and reliability for the electraci incurvite and reliability for the reliability for the reliability evaluation checks for safety and reliability for the reliabili

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.

Rohs, Complant Complant		CHECKED BaBo	REVISION 001.001	DATE (YYYY-MM-DD) 2020-06-04	GENERAL TOLERANCE DIN ISO 2768-1m		PROJECTION METHOD	$-\bigcirc$	€-
		WR-COM USB 3.1 Plug Horizontal							
	Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions Max-Eyth-Str. 1 74638 Waldenburg Germanv					ORDER CODE	7120000)11	
	elementy Tel. +49 (0) 79 42 945 - 0 www.we-online.com elSos@we-online.com	size/type Type C			BUSINESS UNIT eiCan	status Valid		1	page 7/7

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 evaluation (automotive control, train control, ship control, train contro

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for USB Connectors category:

Click to view products by Wurth manufacturer:

Other Similar products are found below :

65-647-8-BK-BU 950 952 E8144-B01021-L A-USB B-TOP-C MUSBA511N5 MUSBD11135 217450-1 KMBVX-TH-5S-B30 896-30-004-00-000000 KUSBVX-BS1N-W30 KUSBX-AP-KIT-SCBLK KUSBX-AS2N-W KUSBX-SMT2AP1S-W KUSBX-SMT2AP1S-W30 935 957 30-498-6 SK-60A-2 17-210051 1734082-1 30-1574 30-470 30-489 30-541 30-572-3 A-USB A-2P-C MIKROE-1451 USBFTV2PEM2G USBFTVC6ZN KUSBX-AS2N-W30 KUSBX-SLAS1N-W KUSBX-SMT-AS1N-W30 4689-1 1-1734084-2 E8110-001-01 33UBARS1-04SW11 33UBAR-04SW11 USBF21ZNSCC USBBFTV6ZC 10135326-001LF M9177/3-1 USB-A-S-F-B-VT 925 4198 690-024-633-031 KUSBEX-BSFS1N-W USBFTVC6MRG UA-20BMFA-SL8001 17-250101