

PCB LAYOUT \* - COMPONENT VIEW

## TECHNICAL CHARACTERISTICS

### MATERIAL

INSULATOR: LCP

FLAMABILITY RATING: UL94-V0

COLOR: BLUE

CONTACT MATERIAL: PHOSPHORE BRONZE

CONTACT TYPE: STAMPED

CONTACT PLATING: UNDERPLATE 1.27 to 2.54 µm Ni

CONTACT AREA 0.76 µm Gold

SOLDER TAIL AREA 2.54 to 5.08 µm Matt Tin

SHIELDING: BRASS MATT TIN PLATED

### ENVIRONMENTAL

OPERATING TEMPERATURE: -20 up to +85°C

COMPLIANCE: RoHS & LEAD FREE AS PER DIRECTIVE 2002/95/EC

HALOGEN FREE COMPLIANT AS PER IEC 61249-2-21

### ELECTRICAL

CURRENT RATING:

- PIN 1 & PIN 4 (Vbus & corresponding ground PIN) 1.8A Max

- OTHER PINS 0.25 A Max

WORKING VOLTAGE: 30Vac

DIELECTRIC WITHSTANDING VOLTAGE: 100Vac/min

INSULATION RESISTANCE: > 100MΩ

CONTACT RESISTANCE:

- PIN 1 & PIN 4: 30mΩ Max

- OTHER PINS: 50mΩ Max

### STANDARD

CE CERTIFIED: E323964 / MODEL NUMBER 692122030100

### MECHANICAL

INSERTION FORCE: 35.0N Max

EXTRACTION FORCE: 10.0N min

QUALITY CLASS: 5000 MATING CYCLES


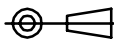
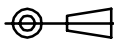
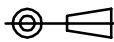
### SOLDERING

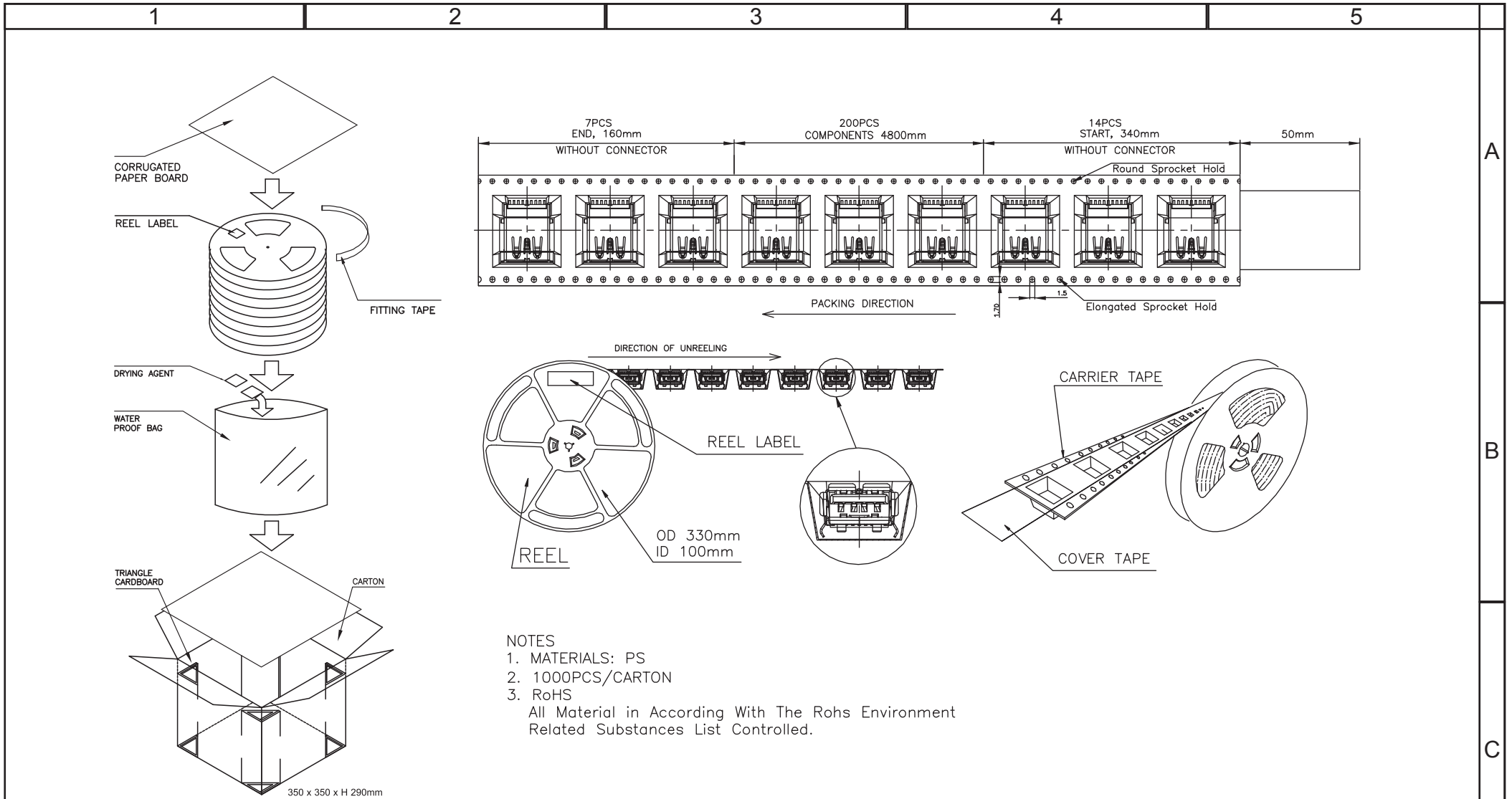
REFLOW PROCESS AS PER JEDEC J-STD-020D

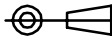

### PACKAGING

TAPE & REEL

\* NOTE: THE RECOMMENDED PCB LAYOUT IS FOR AN OPTIMIZED RETENTION FORCE OF CONNECTOR ON PCB BUT IT IMPLIES INSERTION FORCE THAT A LOT OF PICK AND PLACE MACHINES ARE NOT ABLE TO HANDLE. THEREFORE IT MIGHT BE NECESSARY TO DRILL BIGGER HOLES FOR THE CLIPS. PLEASE CHECK THIS CAREFULLY.

RoHS Compliant				PROJECTION:	GENERAL TOLERANCE		DESCRIPTION: USB 3.0 HORIZONTAL TYPE A	SIZE
G	01-APR-14	SOLDERING	QL					
F	17-SEP-13	CHARACTERISTICS	QL		.X = +/- 0.2		UNIT: MM	<b>A4</b>
E	10-SEP-13	DIM UPDATE	QL		.XX = +/- 0.15			
D	09-NOV-11	STENCIL	GG					
C	21-SEP-11	NOTE	GG					
B	10-MAY-11	UL	GG					
A	04-AUG-10	PDF	JP	APPROVAL: RJ			<b>WERI PART NO: 692 122 030 100</b>	
REV	DATE	FILE	BY					



RoHS Compliant				<div>PROJECTION:</div> <div></div>	<div>GENERAL TOLERANCE</div> <div>.X = <math>\pm</math> 0.2</div> <div>.XX = <math>\pm</math> 0.15</div>	<div></div> <div>WÜRTH ELEKTRONIK</div>		
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B					SCALE:			
A					SHEET: 2/3	WERI PART NO: 692 122 030 100		
REV	DATE	FILE	BY		DRAW: JOE			

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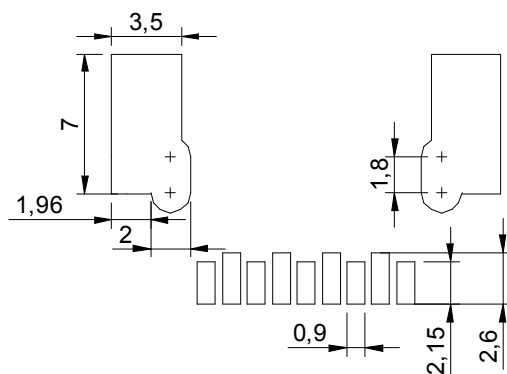
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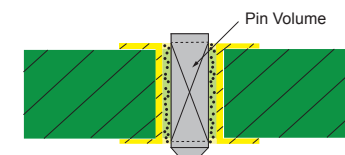
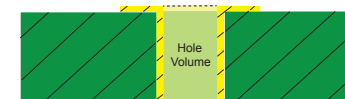
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## Stencil information for Through Hole Reflow soldering



STENCIL LAYOUT \* - COMPONENT VIEW

## PCB cross section

 Free volume for solder paste

Theoretical Formula for Through Hole pins

Volume of the stencil aperture = (Hole volume - Pin volume) x 2

or

Volume of solder paste = (Hole volume - Pin volume) x 2

Stencil

Stencil Thickness: 150 µm

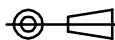
PCB

PCB thickness: 1.6mm

RoHS Compliant

\* NOTE: SEE PCB LAYOUT PAGE 1/3 FOR MISSING DIMENSIONS

PROJECTION:



GENERAL TOLERANCE

.X =  $\pm 0.2$ .XX =  $\pm 0.15$ 

APPROVAL: RJ

UNIT: MM

SCALE:

SHEET: 3/3

DRAW: JOE

DESCRIPTION: USB 3.0 HORIZONTAL TYPE A

WERI PART NO: 692 122 030 100

SIZE

**A4**

1	2	3	4	5																																															
<div>Cautions and Warnings:</div> <div>The following conditions apply to all goods within the product services of the Connectors of Würth Elektronik eiSos GmbH &amp; Co. KG:</div> <div>General:<ul style="list-style-type: none"><li>This electronic component is designed and developed with the intention for use in general electronics equipment.</li><li>Before incorporating the components into any equipment in the field 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 or if there is possibility of direct damage or injury to human body, Würth Elektronik must be asked for a written approval.</li><li>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.</li><li>The connector is designed and manufactured to be used within the datasheet specified values.</li><li>Do not use the connector outside the datasheet specifications.</li><li>Prevent any damage or scratches on the connector, especially on the actuator.</li><li>Direct mechanical impact to the product shall be prevented (e.g overlapping of the PCB's).</li><li>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.</li><li>Würth Elektronik products are qualified according to international standards which are listed into each product reliability report.</li><li>All products characteristics are therefore given according to results obtained throughout these detailed tests protocols. May any product characteristic be qualified by the customer, out of given Würth Elektronik specifications, Würth Elektronik cannot insure its validity and sustainability over time.</li><li>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.</li></ul></div> <div>Product Specific:</div> <div>Soldering:<ul style="list-style-type: none"><li>The solder profile must comply with the Würth Elektronik technical soldering specification, otherwise this will void the warranty.</li><li>Other soldering methods are not verified and have to be validated by the customer at his own risk.</li></ul></div>			<div>Cleaning and Washing:<ul style="list-style-type: none"><li>Parts are not constructed for washing, so washing can cause malfunction afterwards.</li><li>Cleaning agent that are used to clean the customer applications might damage or change the characteristics of the component, body, pins and termination.</li><li>Please do not submerge our washable products into water or cleaning agents or put them in locations exposed to water completely.</li><li>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.</li><li>We recommended a solution without organic acid (preserve the plating against corrosion) volatile, without residues and compatible with the plastic.</li><li>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.</li></ul></div> <div>Storage Conditions:<ul style="list-style-type: none"><li>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.</li></ul></div> <div>Handling:<ul style="list-style-type: none"><li>Do not repeatedly operate the connector with excessive force. It may damage or deforms the contact dome which results in malfunction.</li><li>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.</li></ul></div>		A																																														
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