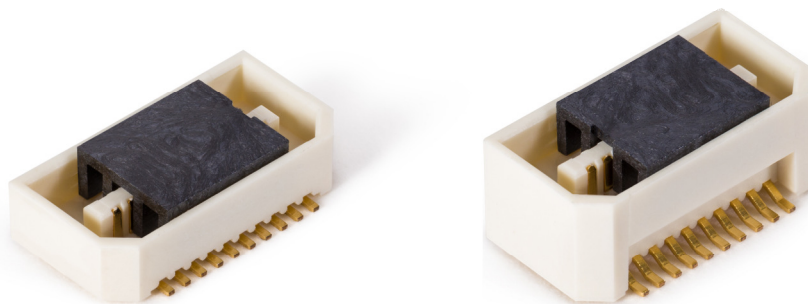




BitPipe host connectors

BW420C330 / BW420C530

Datasheet



Rev 1.0

16/04/2018

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1. Document Revision History

Revision	Date	Comments
1.0	2018-04-16	Initial release

2. Specifications

2.1. Electrical Characteristics

Item	Specifications	Conditions
Rated Current	0.5 A	
Rated Voltage	60V AC/DC	
Breakdown Voltage	250V AC for 1minute	< 1mA
Insulation Resistance	> 1000 MΩ	Measured at 100 VDC
Contact Resistance	< 60 mΩ	Measured at 100 mA
Capacitance	> 2 pF	Measured at 1000 ± 10 Hz between adjacent contacts

2.2. Mechanical Characteristics

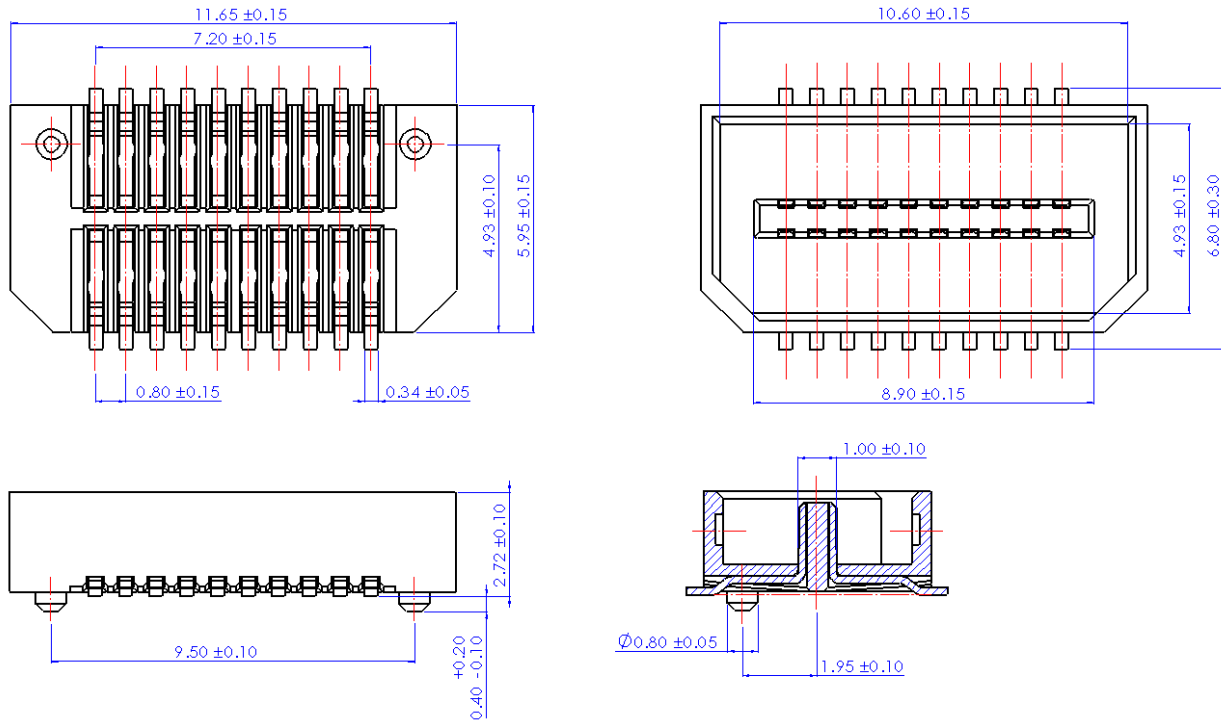
Item	Specifications	Conditions
Insertion force	Max. 29.5 N	20 pin contact
Removal force	Min. 8 N	20 pin contact
Durability	50 Cycles	Repeated insertion and removal speed of max. 200 times/hour

2.3. Environmental Characteristics

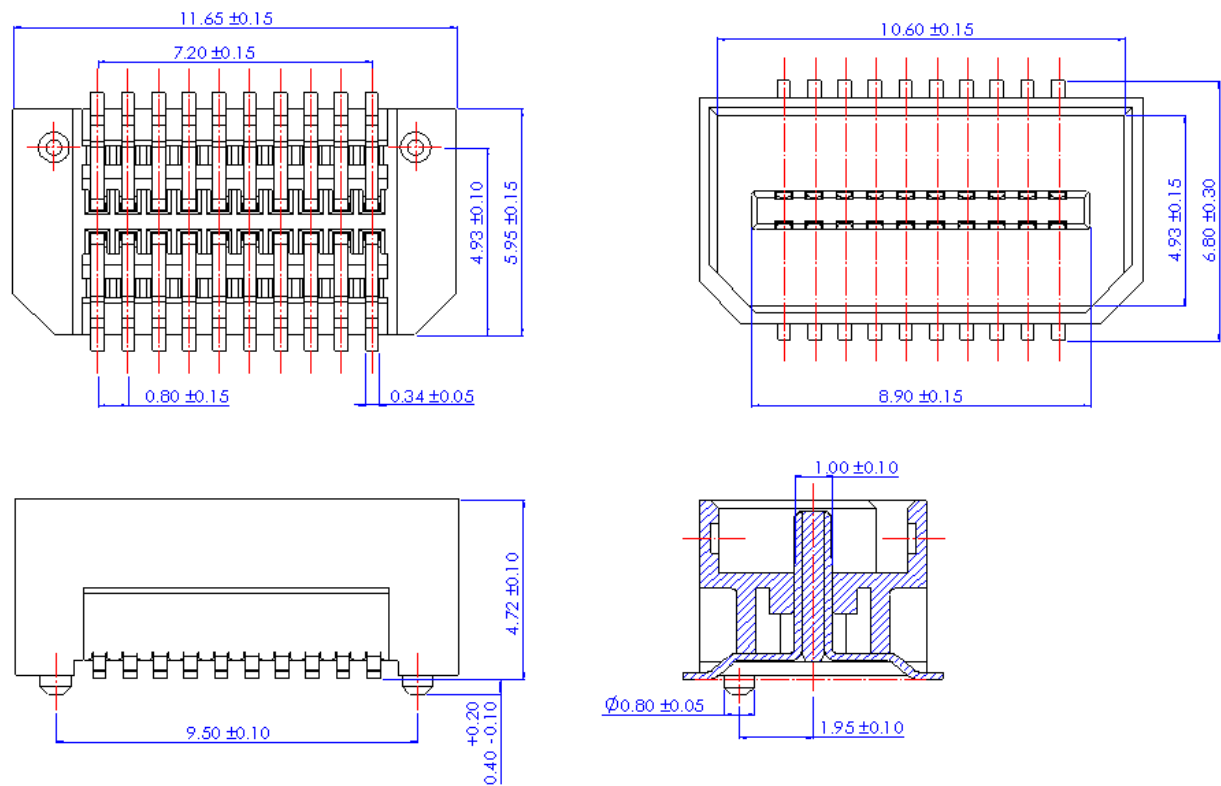
Item	Specifications	Conditions															
Ambient temperature	-55°C to 85°C	No freezing at low temperatures															
Storage temperature	-55°C to 85°C (product only)	No freezing at low temperatures No dew condensation															
	-40°C to 50°C (standard packing)																
Soldering heat resistance	260±5°C for 10 secs	Infrared reflow															
	390±5°C for 5 secs	Soldering iron															
Thermal shock resistance (header and socket mated)	10 Cycles Contact resistance < 60 mΩ	<table border="1"> <thead> <tr> <th>Order</th> <th>Temp.</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-55°C ↕</td> <td>30 min</td> </tr> <tr> <td>2</td> <td>20°C to 35°C ↕</td> <td>2 to 3 min</td> </tr> <tr> <td>3</td> <td>85°C ↕</td> <td>30 min</td> </tr> <tr> <td>4</td> <td>20°C to 35°C</td> <td>2 to 3 min</td> </tr> </tbody> </table>	Order	Temp.	Time	1	-55°C ↕	30 min	2	20°C to 35°C ↕	2 to 3 min	3	85°C ↕	30 min	4	20°C to 35°C	2 to 3 min
		Order	Temp.	Time													
		1	-55°C ↕	30 min													
		2	20°C to 35°C ↕	2 to 3 min													
		3	85°C ↕	30 min													
4	20°C to 35°C	2 to 3 min															
Humidity resistance (header and socket mated)	Insulation resistance > 100 MΩ Contact resistance < 60 mΩ	120 hours at 40±2°C Relative humidity of 90% to 95%															
		24 hours at 35±1°C Salt solution : 5% ± 1% (by weight)															
Saltwater spray resistance (header and socket mated)	Insulation resistance > 100 MΩ Contact resistance < 60 mΩ																

3. Mechanical Drawing Dimensions (Unit: mm)

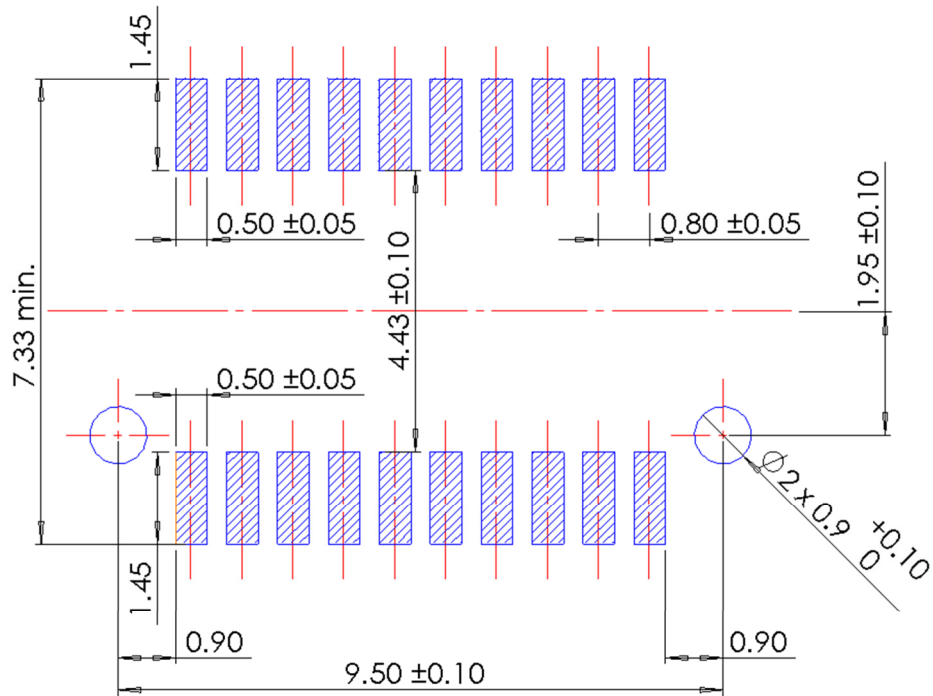
3.1. Part Number: BW420C330



3.2. Part Number: BW420C530



3.3. Recommended Footprint

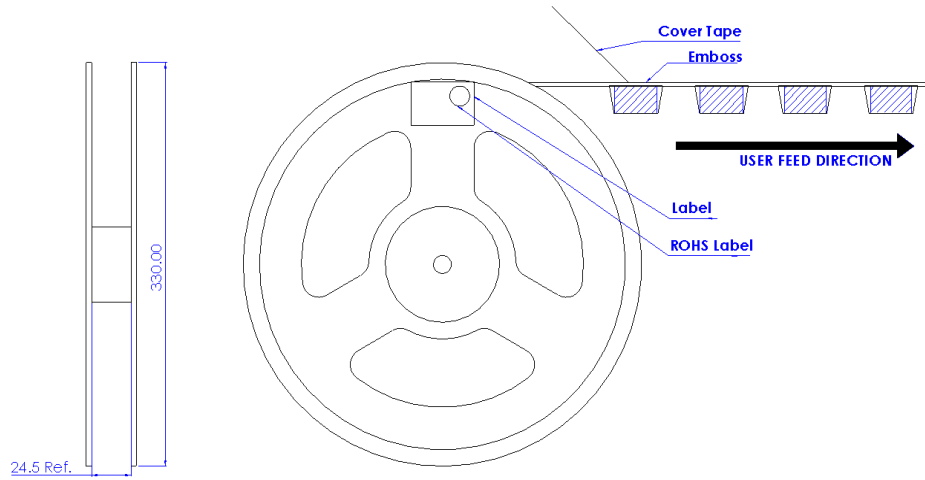


4. Ordering Information

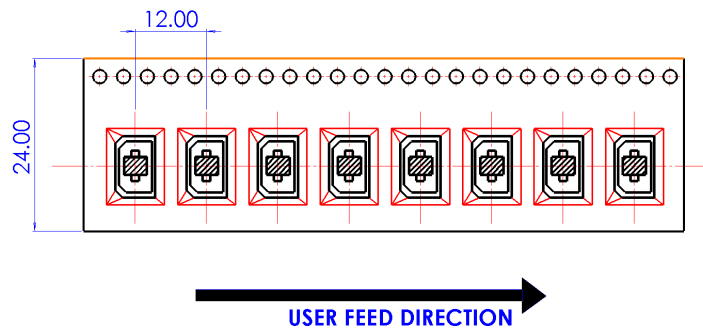
Part Number	Description	Quantity	Format	Suction Cap
BW420C330-CT100	Bitpipe Host Connector 3mm	100 pcs	Cut-Tape	Included
BW420C330-TR	Bitpipe Host Connector 3mm	1500 pcs	Tape in Reel	Included
BW420C530-CT100	Bitpipe Host Connector 5mm	100 pcs	Cut-Tape	Included
BW420C530-TR	Bitpipe Host Connector 5mm	1000 pcs	Tape in Reel	Included

5. Tape and Reel Informations (Unit: mm)

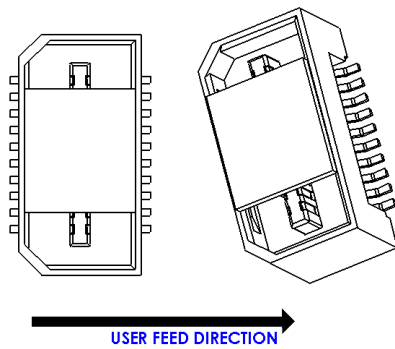
5.1. Reel Dimensions



5.2. Embossed Tape Dimensions

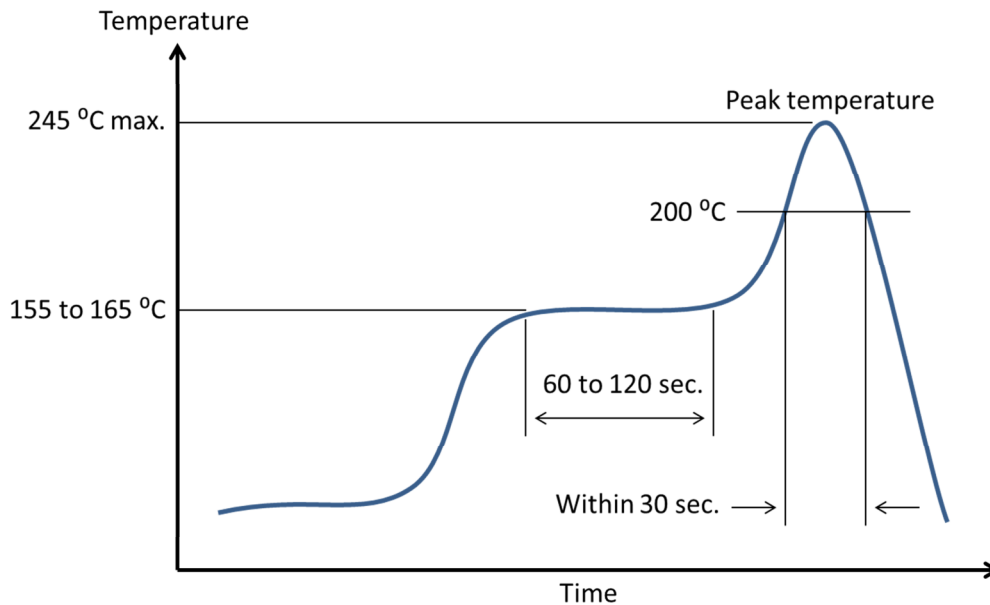


5.3. Connector Orientation in Embossed Tape



6. Reflow Soldering

Please use the recommended reflow temperature profile conditions below for reflow soldering.



- I. All temperatures are measured at the surface of the PCB near the connector terminals. The settings for the sensor will vary depending on the type, which requires careful reading of the sensor's specific instructions.
- II. The temperature profile is based on the usage of the connector on a resin-based board. When performed reflow soldering on a metal board (iron, aluminum, etc.) or a metal table to mount on a FPC, make sure that no deformations or discolorations occurred before mounting.
- III. Some solder and flux types may cause serious solder or flux creeping. Solder and flux characteristics should be looked at before setting the reflow soldering conditions.

7. Support

support@briowireless.com

For online support and downloads please go to:

<https://www.briowireless.com/product/bitpipe-host-connector/>

You will find the following downloads:

Datasheet
Altium Schematic Symbol
Altium Layout Footprint
3D Step files