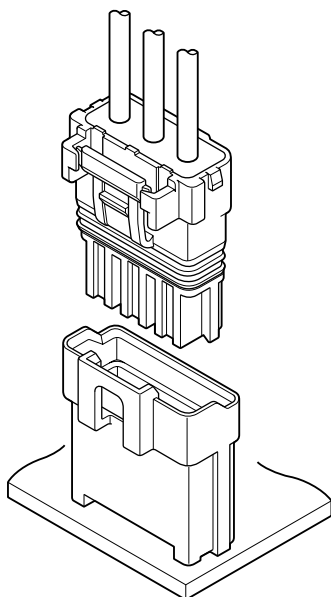




# WPJ CONNECTOR

**5.0mm pitch/Disconnectable Crimp style connectors**



**Compact, Water Resist and Durable. This connector for electrical connection can be used on both waterproof and non-waterproof conditions, depending on the usage. Just by placing a rubber part will change it into a water resistant connector. Both conditions are using the same header.**

- Waterproof performance [Grade 7 ingress protection of JIS C 0920 (IPX7 of IEC 60529) ]
- Control key system
- Contacting part of contact is hardly deformed
- Inner locking system
- Compact design

## Specifications

- Current rating: 7 A AC, DC (AWG #18)
- Voltage rating: 300 V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10 mΩ max.  
After environmental tests/ 20 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 1,500 VAC/minute
- Applicable wire: Conductor size/ AWG #22 to #18  
Insulation O.D./ 2.32 to 2.83 mm  
1.52 to 2.03 mm
- Waterproof grade: Grade 7 ingress protection of JIS C 0920 (IPX7 of IEC 60529 )

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

\* Compliant with RoHS.

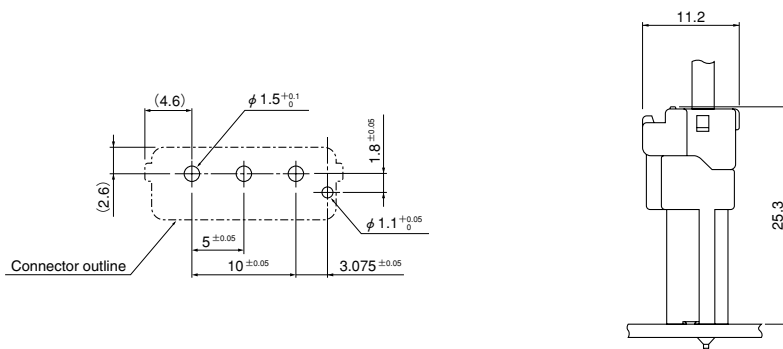
## Standards

Recognized E60389

Certified LR20812

R50073100

## PC board layout and Assembly layout

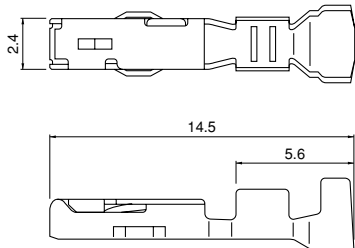


Note: 1. The above figure is the figure viewed from the connector mounting side.  
2. Tolerances are non-cumulative: ±0.05 mm for all centers.  
3. The dimensions above should serve as a guideline. Contact JST for details.

# WPJ CONNECTOR

(Non-waterproof type)

## Contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG#		
<b>SWPJR-21T-M0.5</b>	0.33~0.83	22~18	2.32~2.83	4,500
<b>SWPJR-21T-M0.5A</b>	0.33~0.83	22~18	1.52~2.03	4,500

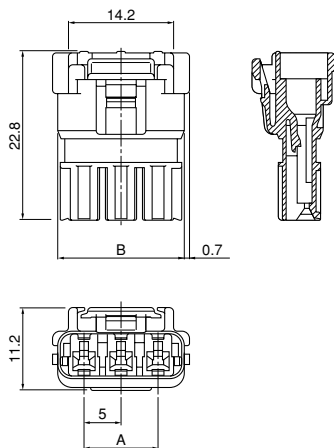
### Material and Finish

Copper alloy, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SWPJR-21T-M0.5</b>	AP-K2N	MKS-L	MK/SWPJR/T-21-05	APLMK SWPJR/T21-05
		—	—	—
<b>SWPJR-21T-M0.5A</b>		MKS-L	MK/SWPJR/T-21-05A	APLMK SWPJR/T21-05A
		—	—	—

## Housing



### Receptacle housing

Circuits	Model No.	A	B	Q'ty/bag
2	<b>WPJR-02V-1-S</b>	—	12.1	1,000
3	<b>WPJR-03V-1-S</b>	10.0	17.1	1,000

### Material

Glass-filled PBT, UL94V-0, natural (white)

### RoHS compliance

<For reference> Polarizing key pattern

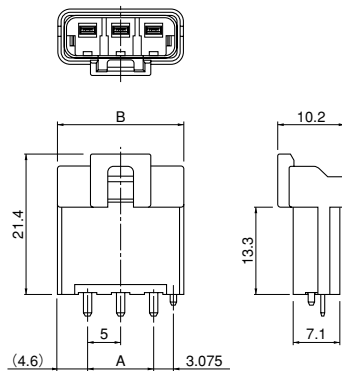
Key pattern 1 (Color: Natural): **WPJR-02V-1-S**

Key pattern 2 (Color: Red): **WPJR-02V-2-R**

Key pattern 3 (Color: Blue): **WPJR-02V-3-E**

For availability, delivery and minimum order quantity, contact JST.

## Header



Circuits	Model No.	A	B	Q'ty/box
2	<b>B02B-WPJSS-1</b>	—	14.2	600
3	<b>B03B-WPJSS-1</b>	10.0	19.2	390

### Material and Finish

Wafer: Glass-filled PBT, UL94V-0

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

### RoHS compliance

This product displays (LF)(SN) on a label.

<For reference> Polarizing key pattern

Key pattern 1 (Color: Natural): **B02B-WPJSS-1**

Key pattern 2 (Color: Red): **B02B-WPJRS-2**

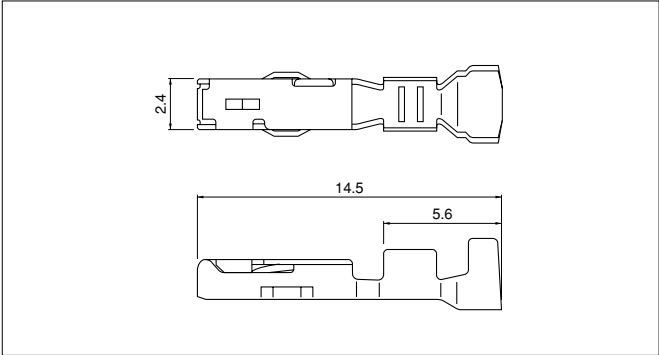
Key pattern 3 (Color: Blue): **B02B-WPJES-3**

For availability, delivery and minimum order quantity, contact JST.

# WPJ CONNECTOR

(Waterproof type)

## Contact

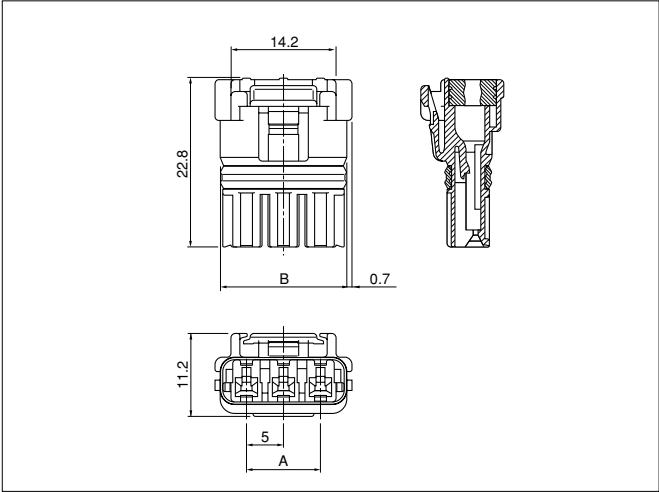


Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG#		
SWPJR-21T-M0.5	0.33~0.83	22~18	2.32~2.83	4,500

Material and Finish				
Copper alloy, tin-plated (reflow treatment)				

RoHS compliance				
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SWPJR-21T-M0.5	AP-K2N	MKS-L	MK/SWPJR/T-21-05	APLMK SWPJR/T21-05
		—	—	—

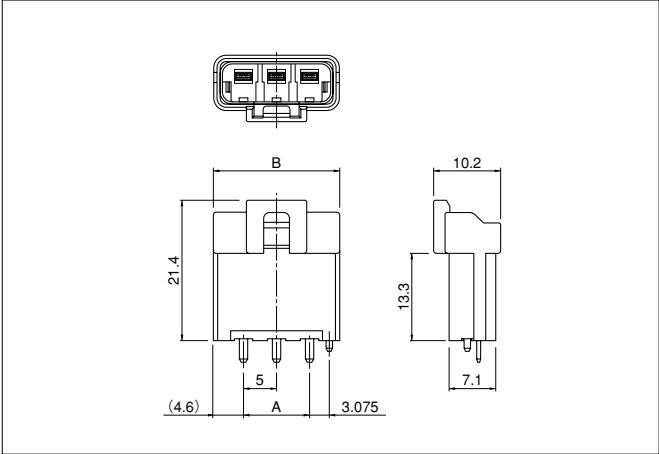
## Housing



Receptacle housing assembly				
Circuits	Model No.	A	B	Q'ty/box
2	02R-WPJV-1-SMM	—	12.1	720
3	03R-WPJV-1-SMM	10.0	17.1	576
Material				
Receptacle housing: Glass-filled PBT, UL94V-0, natural (white)				
Seal ring: Silicon, green				
Seal rubber plate: Silicon, green				

RoHS compliance	
<For reference> Polarizing key pattern	
Key pattern 1 (Color: Natural):	02R-WPJV-1-SMM
Key pattern 2 (Color: Red):	02R-WPJV-2-RMM
Key pattern 3 (Color: Blue):	02R-WPJV-3-EMM
For availability, delivery and minimum order quantity, contact JST.	

## Header



Circuits	Model No.	A	B	Q'ty/box
2	B02B-WPJSS-1	—	14.2	600
3	B03B-WPJSS-1	10.0	19.2	390
Material and Finish				

Wafer: Glass-filled PBT, UL94V-0	
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)	
<hr/>	
<b><i>RoHS compliance</i></b> <i>This product displays (LF)(SN) on a label.</i>	
<i>&lt;For reference&gt;</i> <i>Polarizing key pattern</i>	
<i>Key pattern No.1(Color: Natural):</i>	<b>B02B-WPJSS-1</b>
<i>Key pattern No.2(Color: Red):</i>	<b>B02B-WPJRS-2</b>
<i>Key pattern No.3(Color: Blue):</i>	<b>B02B-WPJES-3</b>
<i>For availability, delivery and minimum order quantity, contact JST.</i>	