

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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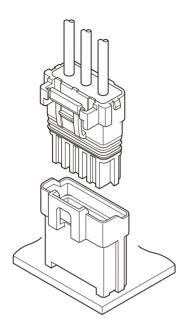






# WPJ CONNECTOR

# 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 (IEC 60529 IPX7) ]
- Control key system
- Contacting part of contact is hardly deformed
- · Inner locking system
- Compact design

# Specifications -

• Current rating: 7A AC, DC (AWG #18)

• Voltage rating: 300V AC, DC

• Temperature range: -25°C to +85°C

(including temperature rise in applying

electrical current)

• Contact resistance: Initial value/10m  $\Omega$  max.

After environmental testing/20m  $\Omega$  max.

Insulation resistance: 1,000M Ω min.
Withstanding voltage: 1,500V AC/minute
Applicable wire: Conductor size/AWG #22 to #18

Insulation O.D./2.32 to 2.83mm

1.52 to 2.03mm

• Waterproof grade: Grade 7 ingress protection of

JIS C 0920(IEC 60529 IPX7)

\* Compliant with RoHS.

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

\* Contact JST for details.

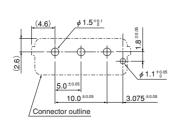
## Standards -

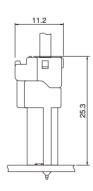
Recognized E60389

Certified LR20812

△ File No.R50073100

# PC board layout (viewed from component side) and Assembly layout





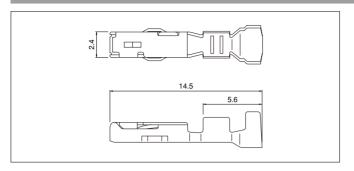
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. The dimensions above should serve as a guideline. Contact JST for details.

# **WPJ CONNECTOR**

(Non-waterproof type)

# Contact



| Model No.        | Applicable wire |       | Inquistion O.D. (mm) | Olt. /1     |
|------------------|-----------------|-------|----------------------|-------------|
|                  | mm²             | AWG#  | Insulation O.D. (mm) | Q'ty / reel |
| SWPJR-21T-M0.5   | 0.33~0.83       | 22~18 | 2.32~2.83            | 4,500       |
| *SWPJR-21T-M0.5A | 0.33~0.83       | 22~18 | 1.52~2.03            | 4,500       |

#### Material and Finish

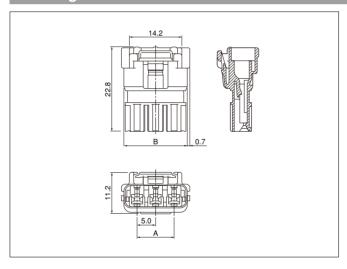
Copper alloy, tin-plated (reflow treatment)

#### RoHS compliance

Note: \*Marked product is not CSA/TÜV approved.

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

# Housing



### Receptacle housing

| Circuits | Model No.    | Α    | В    | Q'ty / bag |
|----------|--------------|------|------|------------|
| 2        | WPJR-02V-1-S | 1    | 12.1 | 1,000      |
| 3        | WPJR-03V-1-S | 10.0 | 17.1 | 1,000      |

#### Material

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

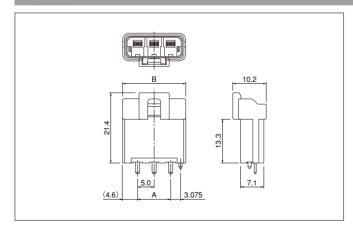
#### RoHS compliance

<For reference> Polarizing key pattern

Key pattern No.1(Color: Natural): WPJR-02V-1-S Key pattern No.2(Color: Red): WPJR-02V-2-R Key pattern No.3(Color: Blue): WPJR-02V-3-E

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

# Header



| Circuits | Model No.    | Α    | В    | Q'ty / bag |
|----------|--------------|------|------|------------|
| 2        | B02B-WPJSS-1 | -    | 14.2 | 400        |
| 3        | B03B-WPJSS-1 | 10.0 | 19.2 | 300        |

# 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

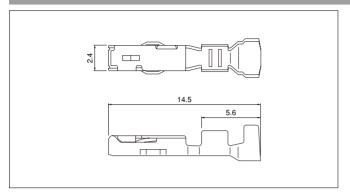
Key pattern No.1(Color: Natural): B02B-WPJSS-1 B02B-WPJRS-2 Key pattern No.2(Color: Red): Key pattern No.3(Color: Blue): B02B-WPJES-3

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

# WPJ CONNECTOR

# (Waterproof type)

# Contact



| Model No.      | Applicable wire                    |      | Institute O.D. (man) | 04/         |  |
|----------------|------------------------------------|------|----------------------|-------------|--|
| wodel No.      | mm²                                | AWG# | Insulation O.D. (mm) | Q ty / reei |  |
| SWPJR-21T-M0.5 | <b>IR-21T-M0.5</b> 0.33~0.83 22~18 |      | 2.32~2.83            | 4,500       |  |

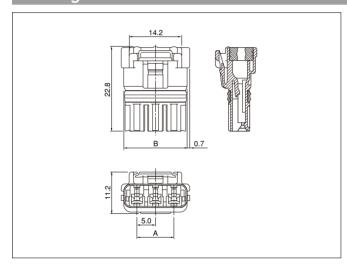
#### Material and Finish

Copper alloy, tin-plated (reflow treatment)

#### RoHS compliance

| Contact        | Crimping | Applicator       |                  |                            |  |
|----------------|----------|------------------|------------------|----------------------------|--|
| machine        |          | Crimp applicator | Dies             | Crimp applicator with dies |  |
| SWPJR-21T-M0.5 | AP-K2N   | MKS-L            | MK/SWPJR/T-21-05 | APLMK SWPJR/T21-05         |  |
| 3WFJN-211-WU.5 |          | _                | _                | _                          |  |

# Housing



## Receptacle housing assembly

| Circuits | Model No.      | Α    | В    | Q'ty / box |
|----------|----------------|------|------|------------|
| 2        | 02R-WPJV-1-SMM | -    | 12.1 | 240        |
| 3        | 03R-WPJV-1-SMM | 10.0 | 17.1 | 192        |

#### Material

Receptacle housing: Glass-filled PBT, UL94V-0, natural (white) Seal ring: Silicon, green Seal rubber plate: Silicon, green

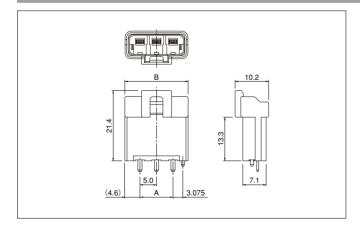
### RoHS compliance

<For reference> Polarizing key pattern

Key pattern No.1(Color: Natural): 02R-WPJV-1-SMM Key pattern No.2(Color: Red): 02R-WPJV-2-RMM Key pattern No.3(Color: Blue): 02R-WPJV-3-EMM

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

# Header



| Circuits | Model No.    | Α    | В    | Q'ty / bag |
|----------|--------------|------|------|------------|
| 2        | B02B-WPJSS-1 | -    | 14.2 | 400        |
| 3        | B03B-WPJSS-1 | 10.0 | 19.2 | 300        |

#### 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 No.1(Color: Natural): B02B-WPJSS-1 B02B-WPJRS-2 Key pattern No.2(Color: Red): B02B-WPJES-3 Key pattern No.3(Color: Blue):

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