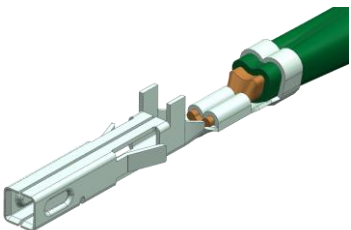
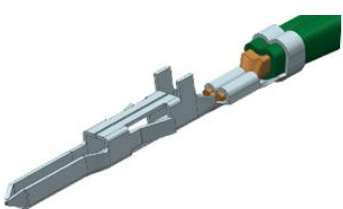
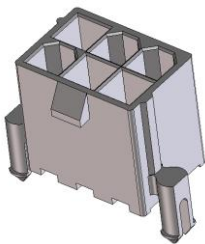
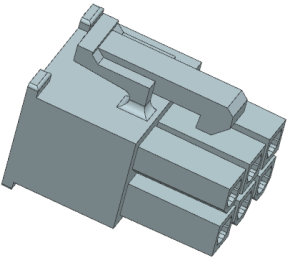
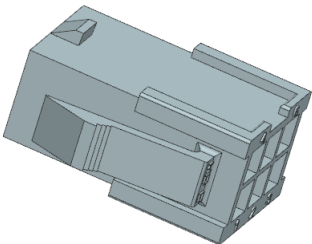
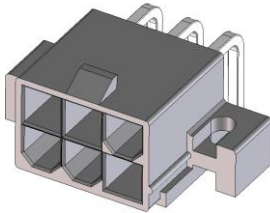


MINI-FIT JR CONNECTOR SYSTEM

See section 2.1 for series numbers

Receptacle	Plug	Standard Header
<p>Female Crimp Terminal</p> 	<p>Male Crimp Terminal</p> 	<p>Vertical Header</p> 
<p>Receptacle Housing</p> 	<p>Plug Housing</p> 	<p>Right Angle Header</p> 

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55560002-AS	JERRY WANG	NICOLAS ZHANG	NICOLAS ZHANG



APPLICATION SPECIFICATION

1.0 SCOPE

This Application Specification covers the performance requirements for the MINI-FIT JR Wire-To-Wire and Wire-To-Board, 4.20mm pitch dual row connector series using brass, phos bronze and high conductive copper alloy terminals with Tin and Gold plating terminated with 16 to 28 AWG wire using Molex crimp technology.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER(S)

WIRE-TO-BOARD CONNECTOR	
Description	Series Number
MINI-FIT JR RECEPTACLE HOUSING	5557/46992
Use with parts	
Female Crimp Terminal	5556/45750/46018
Mates with parts	
Right Angle Hdr, Dual Row	35318
Right Angle Hdr, Dual Row	87427
Right Angle Hdr, Dual Row, Glow Wire Capable	172448
Right Angle Hdr, Dual Row, Reflow Capable	46991
Right Angle Hdr, Single Row, Reflow Capable	172648
Right Angle Hdr	5569
Vertical Hdr	5566
Vertical Hdr, Dual Row	43460
Vertical Hdr, Dual Row Glow Wire Capable	172447
Vertical Hdr, Dual Row Reflow Capable	46207
Vertical Hdr, Single Row	172647

WIRE-TO-WIRE CONNECTOR	
Description	Series Number
MINI-FIT JR RECEPTACLE HOUSING	5557/46992
Use with parts	
Female Crimp Terminal	5556/45750/46018
Mates with parts	
Mini-Fit JR Plug Housing	5559/46993/172646
Male Crimp Terminal	5558/46012

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APPLICATION SPECIFICATION

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate sales drawings for the information on dimensions, materials, platings and markings.

3.0 GENERAL APPLICATION NOTES

3.1 Appearance:

- Parts conform to class "B" requirements of cosmetic specification PS-45499-002 except where noted on the sales drawings.

3.2 Connector Application

- This connector system is designed to mate gold plating to gold plating OR tin plating to tin plating. Never cross mate tin plated parts to gold plated parts.
- Connectors are not to be mated or unmated while circuits are live except per the current interrupt rating listed in product specification: PS-5556-001, PS-5556-004 and PS-45750-001.

3.3 Packaging

- Parts shall be packaged to protect against damage during handling, transit and storage. Nylon parts should remain in their original packaging until ready for use. Refer to Molex specification AS-45499-001 for moisturizing nylon connector parts.

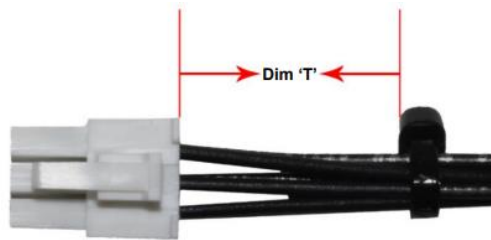
4.0 CRIMPED TERMINAL EXTRACTION

- Male and Female terminal extraction tool: See Molex part# 11030044 instructions online on website. Do not reuse terminals that have been removed with the extraction tool. The housings can be reused if it was not damaged.

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5.0 TIE AND OR WIRE TWIST LOCATION

Circuit Sizes		Dimension T Minimum
Dual Row	Single Row	
2-6	2-3	.50" (12.7 mm)
8	4	.75" (19.1 mm)
10-12	5-6	1.00" (25.4 mm)
14-16	7-8	1.25" (31.75 mm)
18-20	9-10	1.50" (38.09 mm)
22-24	11-12	1.75" (44.45 mm)



- The "T" dimension defines a "free" length of wire, or a length of wire that is not subject to significant bias by external factors such as a wire tie, wire twisting, or other means of bending or deforming of the wires that repositions them from their natural relaxed state or location where they enter the housing. This dimension is a general recommendation and may need to be adjusted for different wire gauges and wire type and insulation thickness and insulation material.
- Wires are to be dressed in such a manner to allow the terminals to float freely in the housing pocket.

6.0 CONNECTOR TESTING

- Refer the PS-5556-001, PS-5556-004 and PS-45750-001 for information on testing.

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7.0 TERMINAL INSERTION INTO HOUSING

Terminals are to be inserted in the housing as shown below in Figure 1 and 3. Notice the orientation of the stop tabs. Do not force terminals into the housing cavity. The terminal and housing are designed with features that provide some light resistance during insertion as well as retention after insertion but if excessive resistance is felt during insertion pull terminal back out and double check that the terminal orientation is per Figure 1 and 3. Terminals are to be inserted until they are fully seated as shown in Figure 2 and 4 and cannot fall out or be pulled out easily. The terminal stop tabs provide a stopping surface and the locking tangs provide a light audible click to indicate a fully inserted terminal.

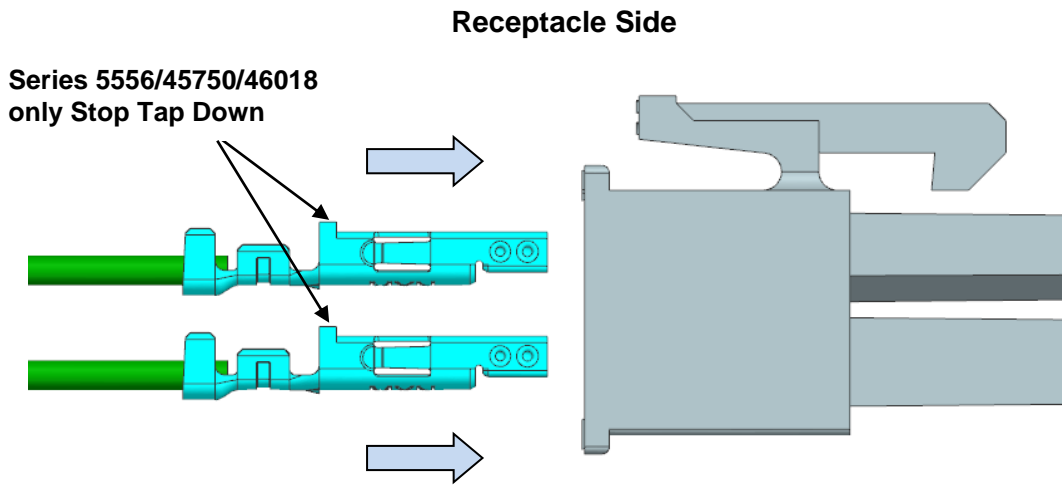


Figure 1

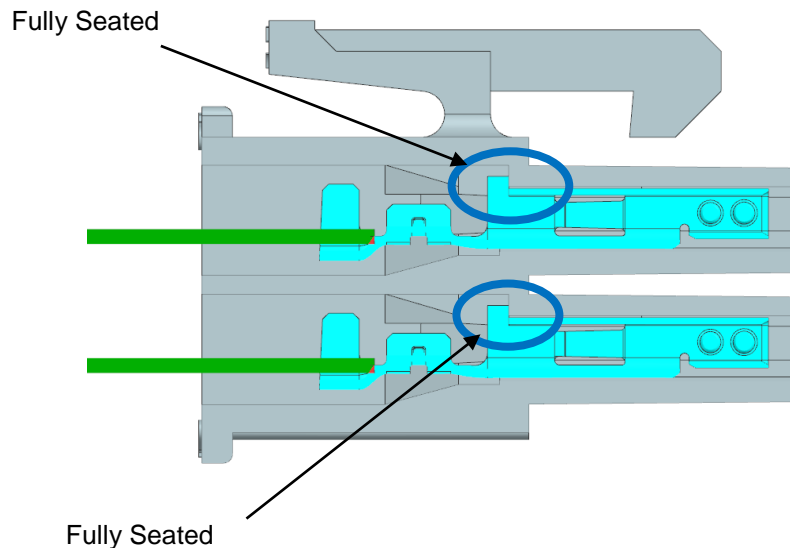


Figure 2

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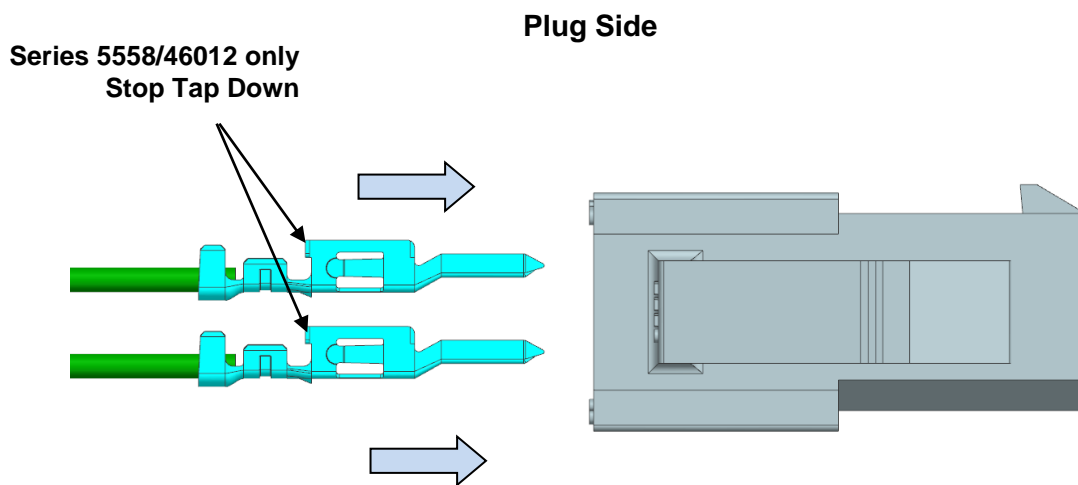


Figure 3

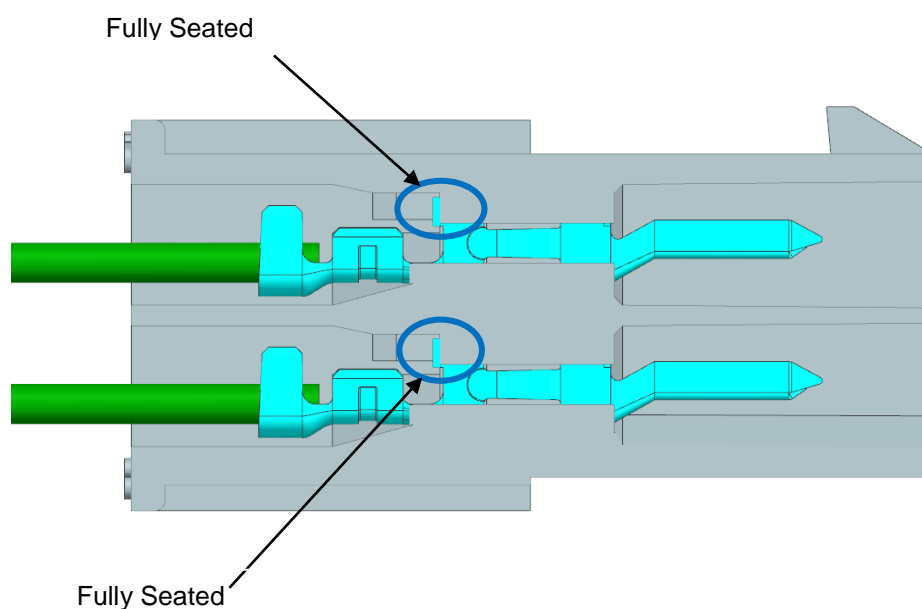
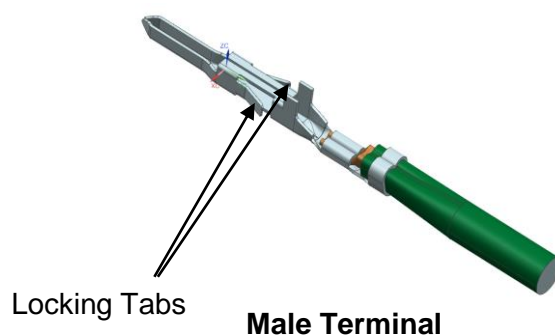
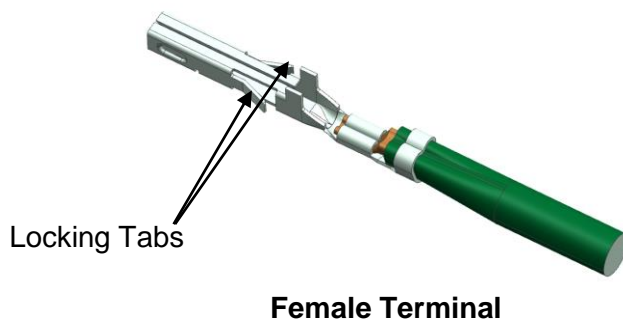


Figure 4

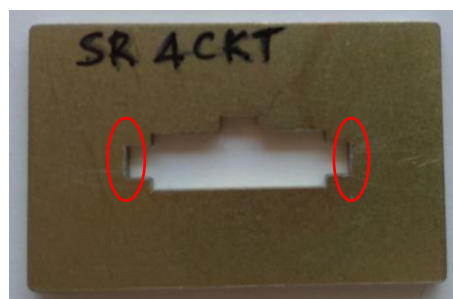
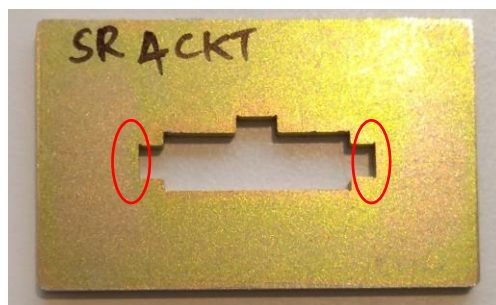
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- Ensure terminals are fully seated and locked during terminal insertion to the receptacle/plug housing.

8.0 MINIFIT JR PLUG HOUSING INSERTION INTO PANEL CUTOUT

Sharp edges on the Panel cutout will restrict or will make plug housing insertion difficult. Hence sharp edges need to be removed before inserting the plug housing parts as shown in below images.



Sharp corners removed at latch insertion area

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APPLICATION SPECIFICATION

9.0 Crimp Terminal Handling

- Due to exposed terminal interface, keep crimp terminals on prepackaged reel until they are crimped onto wires. Store and handle crimped terminals so the interface does not make contact with other terminals or foreign objects. If terminal interface is damaged please discard prior to assembly.

10.0 Crimping

- For acceptable crimp tools and specifications see application tooling section on Molex.com listed for each terminal part number.
- Use with multi strand wire only. Single strand wire should not be used.
- Male and female crimp terminals are designed for single wire and double wire crimping. For double wire crimping see 55560001-AS.
- Use only Molex specified crimp tooling, refer to Molex.com for acceptable crimp tooling. Crimped terminals must also meet Molex crimp specifications. Using crimp tooling/specifications other than specified voids any product warranties and will negatively impact mechanical and electrical performance.

11.0 Header Appearance

- Discoloration in the bandolier carrier area of the pin is inherent to the plating process and is due to the masking effect of the carrier. This discoloration is in a non-functional area of the pin and will not affect the performance of the header assembly. Refer to cosmetic specification PS-45499-002.

12.0 Solder Process Temperatures

- Wave Solder: See PS-5556-001, PS-5556-004 & PS-45750-001.
- Reflow Solder: See PS-5556-004.

13.0 Reflow Soldering Profile

- See AS-40000-5013

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