

# MOLEX APPLICATION SPECIFICATION

# **GUIDELINES FOR MINI-FIT JR. DUAL-WIRE TERMINATION**

#### 1. SCOPE

This Application Specification covers application guidelines for the MINI-FIT JR. 4.20 mm (.165 inch) centerline (pitch) wire to board and wire to wire connector system with tin or 30µ" gold plating dualterminated with combinations of 18 to 22 AWG stranded copper wire using crimp technology.

# 2. PRODUCT DESCRIPTION1

Description	Series Number		
Female Crimp Terminal	5556		
Male Crimp Terminal	5558		

#### 3. REFERENCE DOCUMENTS<sup>1</sup>

Mini-Fit Jr. Product Specification PS-5556-001

Mini-Fit Jr. Dual-Wire Termination Test Summary 55560010-TS

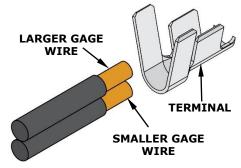
Mini-Fit Jr. Application Tooling Specification<sup>2</sup>

## 4. GENERAL APPLICATION NOTES

# 4.1. CRIMP AND ASSEMBLY REQUIREMENTS

## 4.1.1. WIRE PREP AND CRIMPING<sup>2</sup>

• Wires must be crimped in a vertical configuration with larger-gage wire farther from the terminal body than the smaller-gage wire.2



## 4.1.2. TERMINAL INSERTION INTO HOUSING

 Ensure complete seating of terminal retention features into housing. Large gage wires with large diameter insulation can increase difficulty in fully inserting terminal into housing.

See applicable ATS listed under terminal part number on Molex.com for crimping requirements.

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<b>REVISION:</b>	EC INFORMATION:	TITLE:					SHEET No.
	EC No: <b>627090</b>		APPLICATION SPECIFICATION FOR				
A	MINI-FIT JR DUAL-WIRE TERMINATION					ON	<b>1</b> of <b>3</b>
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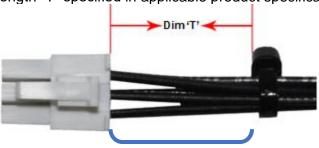
See referenced product specification for applicable product names, series numbers, and reference documents.



# **APPLICATION SPECIFICATION**

#### 4.1.3. WIRE/ HARNESS DRESSING

- Dual-terminated wires exiting a <u>single circuit</u> may be bound together via wire tie, sleeving, shrink-wrap, etc. starting at wire exit from housing.
  - Bindings between wires exiting multiple circuits must respect minimum free length "T" specified in applicable product specification.



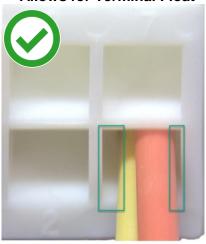
ACCEPTABLE SINGLE-CIRCUIT WIRE TIE LOCATION

# 4.2. INSPECTION NOTES<sup>3</sup>

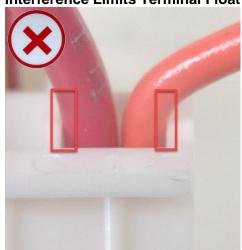
# 4.2.1. INSULATION-TO-HOUSING CONTACT

 Terminals must be allowed to float inside housing pocket. Wire insulation should not limit terminal movement by interfering with the housing.

# Clearance Between Insulation & Housing: Allows for Terminal Float



# No Clearance Between Insulation & Housing: Interference Limits Terminal Float



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<sup>&</sup>lt;sup>3</sup> Inspection notes are not comprehensive. Items listed are for reference only and should be carried out as part of an application-specific inspection plan. Due to significant variations in end-use conditions Molex does not guarantee passing the inspection items listed will always result in acceptable part performance.

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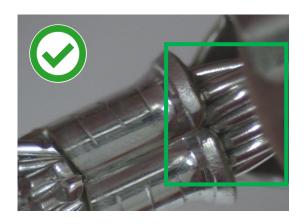


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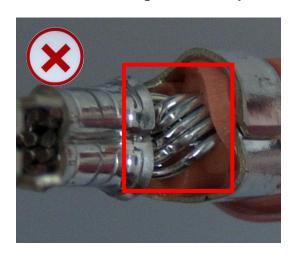
# 4.2.2. DAMAGED STRANDS

• Additional wire volume in conductor crimp can increase the possibility of wire damage during crimping. Inspect wire strands after crimping and before insertion of terminal/wire assembly into housing. Strands should be free of nicks, divots, or any other physical damage as they enter the conductor crimp.

# **Conductors Intact - Acceptable**



# **Conductors Damaged - Unacceptable**



#### 4.2.3. TERMINAL BACKOUT

• Inspect for terminal backout due to incomplete terminal seating. See 4.1.2

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