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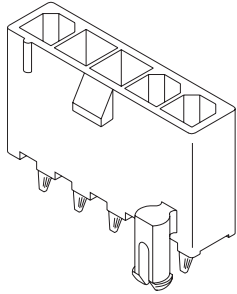
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Jameco Part Number 1443461

## 4.20mm (.165") Pitch Mini-Fit Jr.™ Header

**5566**

### Vertical, Single Row With Pegs



#### Features and Benefits

- Positive housing locks to mate with Mini-Fit Jr. single row receptacles 5557
- Fully isolated terminals to protect contacts from damage
- Peg-mounted vertical headers for increased board retention
- Drain holes are standard to allow washing of PCB after processing (contact Molex for headers without drain holes)

#### Reference Information

Packaging: Tube or bag  
UL File No.: E29179  
CSA File No.: LR19980  
TUV License No.: R75142  
Mates With: 5557 single row receptacle  
PCB Thickness: 1.60mm (.062")  
Process: Wave solder  
Designed In: Millimeters

#### Electrical

Voltage: 600V  
Current: (Used with 16 AWG)

| Series | Circuits |      |      |       |
|--------|----------|------|------|-------|
|        | 2-3      | 4-6  | 7-10 | 12-24 |
| 46083  | 9.0A     | 8.0A | 7.0A | 6.0A  |

Contact Resistance: 10 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 1000 Megohms min.

#### Mechanical

Insertion Force to PCB: 5.0kg max.  
Durability: 30 cycles

#### Physical

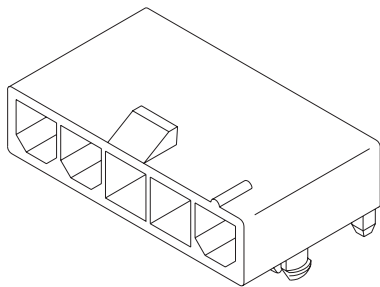
Housing: 6/6 nylon, UL 94V-2 or 94V-0  
Contact: Brass or Phosphor Bronze  
Plating: Tin or Select Gold  
Underplating: Nickel  
Operating Temperature: -40 to +105°C

| Circuits | Order No.                  |                            |                            |                            | Lead-free |
|----------|----------------------------|----------------------------|----------------------------|----------------------------|-----------|
|          | Tin Plated                 |                            | Select Gold Plated (30µ")  |                            |           |
|          | 94V-2                      | 94V-0                      | 94V-2                      | 94V-0                      |           |
| 3        | <a href="#">39-30-5039</a> | <a href="#">39-30-6030</a> | <a href="#">39-30-2037</a> | <a href="#">39-30-2038</a> | Yes       |
| 4        | <a href="#">39-30-5049</a> | <a href="#">50-30-4466</a> | <a href="#">39-30-2047</a> | <a href="#">39-30-2048</a> |           |
| 5        |                            | <a href="#">50-30-4467</a> |                            | <a href="#">39-30-2058</a> |           |

## 4.20mm (.165") Pitch Mini-Fit Jr.™ Header

**5569**

### Right Angle, Single Row With Pegs



#### Features and Benefits

- Pegs provide increased board retention
- Ideal for low profile power applications
- Positive housing locks to mate with Mini-Fit Jr. single row receptacles 5557
- Fully isolated terminals to protect contacts from damage

#### Reference Information

Packaging: Tray or bag  
UL File No.: E29179  
CSA File No.: LR19980  
Mates With: 5557 single row receptacle  
TUV License No.: R75142  
PCB Thickness: 1.60mm (.062")  
Process: Wave solder  
Designed In: Millimeters

#### Electrical

Voltage: 600V  
Current: (Used with 16 AWG)

| Series | Circuits |       |       |       |
|--------|----------|-------|-------|-------|
|        | 2-3      | 4-6   | 7-10  | 12-24 |
| 46083  | 9.0A     | 8.0A  | 7.0A  | 6.0A  |
| 45750  | 12.0A    | 12.0A | 12.0A | 11.0A |

Contact Resistance: 10 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 1000 Megohms min.

#### Mechanical

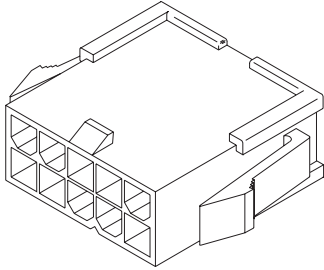
Insertion Force to PCB: 5.0kg max.  
Durability: 30 cycles

#### Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0  
Contact: Brass  
Plating: Tin or Select Gold  
Underplating: Nickel  
Operating Temperature: -40 to +105°C

| Circuits | Order No.                  |                            |                            |                            | Lead-free |
|----------|----------------------------|----------------------------|----------------------------|----------------------------|-----------|
|          | Tin Plated                 |                            | Select Gold Plated         |                            |           |
|          | 94V-2                      | 94V-0                      | 94V-2                      | 94V-0                      |           |
| 3        | <a href="#">39-30-7031</a> | <a href="#">39-30-7032</a> | <a href="#">39-30-4031</a> | <a href="#">39-30-4032</a> | Yes       |
| 4        | <a href="#">39-30-7041</a> | <a href="#">39-30-7042</a> | <a href="#">50-30-4438</a> | <a href="#">50-30-4441</a> |           |
| 5        | <a href="#">39-30-7051</a> | <a href="#">39-30-7052</a> | <a href="#">50-30-4439</a> | <a href="#">50-30-4442</a> |           |

## 4.20mm (.165") Pitch Mini-Fit Jr.™ Plug

**5559**
**Dual Row  
With and without Panel Mount Ears**


### Features and Benefits

- Wire-to-wire plug for panel-mounted or free-hanging applications
- Positive housing locks to mate with Mini-Fit Jr. receptacle
- Fully isolated terminals to protect contacts from damage

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
TUV License No.: R75142  
Mates With: 5557 dual row receptacle  
Use With: 5558, 30490, 46134 or 46012 terminals  
Panel Thickness: .079 to 2.00mm (.031 to 0.80")  
Designed In: Millimeters

### Mechanical

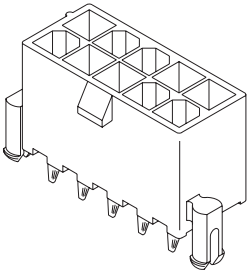
Contact Insertion Force: 1.5kg max.  
Contact Retention to Housing: 3.0kg min.

### Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0  
Operating Temperature: -40 to +105°C

| Circuits | Order No.                  |                            |                            |                            |
|----------|----------------------------|----------------------------|----------------------------|----------------------------|
|          | Panel Mount                |                            | Free Hanging               |                            |
|          | 94V-2                      | 94V-0                      | 94V-2                      | 94V-0                      |
| 2        | <a href="#">39-01-2021</a> | <a href="#">39-01-2026</a> | <a href="#">39-01-3023</a> | <a href="#">39-01-3029</a> |
| 4        | <a href="#">39-01-2041</a> | <a href="#">39-01-2046</a> | <a href="#">39-01-3043</a> | <a href="#">39-01-3049</a> |
| 6        | <a href="#">39-01-2061</a> | <a href="#">39-01-2066</a> | <a href="#">39-01-3063</a> | <a href="#">39-01-3069</a> |
| 8        | <a href="#">39-01-2081</a> | <a href="#">39-01-2086</a> | <a href="#">39-01-3083</a> | <a href="#">39-01-3089</a> |
| 10       | <a href="#">39-01-2101</a> | <a href="#">39-01-2106</a> | <a href="#">39-01-3103</a> | <a href="#">39-01-3109</a> |
| 12       | <a href="#">39-01-2121</a> | <a href="#">39-01-2126</a> | <a href="#">39-01-3123</a> | <a href="#">39-01-3129</a> |
| 14       | <a href="#">39-01-2141</a> | <a href="#">39-01-2146</a> | <a href="#">39-01-3143</a> | <a href="#">39-01-3149</a> |
| 16       | <a href="#">39-01-2161</a> | <a href="#">39-01-2166</a> | <a href="#">39-01-3163</a> | <a href="#">39-01-3169</a> |
| 18       | <a href="#">39-01-2181</a> |                            | <a href="#">39-01-3183</a> |                            |
| 20       | <a href="#">39-01-2201</a> |                            |                            |                            |
| 22       | <a href="#">39-01-2221</a> |                            |                            |                            |
| 24       | <a href="#">39-01-2241</a> | <a href="#">39-01-2246</a> |                            |                            |

## 4.20mm (.165") Pitch Mini-Fit Jr.™ Header

**5566**
**Vertical, Dual Row  
With Pegs, with Drain Holes**


### Features and Benefits

- Board-mounting pegs provide polarization during placement on the PCB and increased retention during soldering process
- Positive housing locks to mate with Mini-Fit Jr. receptacle
- Fully isolated terminals to protect contacts from damage
- Drain holes are standard to allow washing of PCB after processing (contact Molex for headers without drain holes)

### Reference Information

Packaging: Tray or tube  
UL File No.: E29179  
CSA File No.: LR19980  
TUV License No.: R75142  
Mates With: 5557 dual row receptacles  
PCB Thickness: 1.60mm (.062")  
Process: Wave solder  
Designed In: Millimeters

### Electrical

Voltage: 600V  
Current: (Used with 16 AWG)

| Series | Circuits |      |      |       |
|--------|----------|------|------|-------|
|        | 2-3      | 4-6  | 7-10 | 12-24 |
| 46083  | 9.0A     | 8.0A | 7.0A | 6.0A  |

Contact Resistance: 10 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 1000 Megohms min.

### Mechanical

Insertion Force to PCB: 5.0kg max.  
Durability: 30 cycles

### Physical

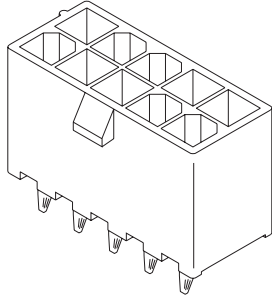
Housing: 6/6 nylon, UL 94V-2 or 94V-0  
Contact: Brass  
Plating: Tin or Select Gold  
Underplating: Nickel  
Operating Temperature: -40 to +105°C

| Circuits | Order No.                  |                            |                            |                            | Lead-free |
|----------|----------------------------|----------------------------|----------------------------|----------------------------|-----------|
|          | Tin Plated                 |                            | Gold Plated (30μ")         |                            |           |
|          | 94V-2                      | 94V-0                      | 94V-2                      | 94V-0                      |           |
| 2        | <a href="#">39-30-6027</a> | <a href="#">39-30-6028</a> | <a href="#">39-29-9024</a> | <a href="#">39-28-9028</a> | Yes       |
| 4        | <a href="#">39-30-6047</a> | <a href="#">39-30-6048</a> | <a href="#">39-29-9044</a> | <a href="#">39-28-9048</a> |           |
| 6        | <a href="#">39-30-6067</a> | <a href="#">39-30-6068</a> | <a href="#">39-29-9064</a> | <a href="#">39-28-9068</a> |           |
| 8        | <a href="#">39-30-6087</a> | <a href="#">39-30-6088</a> | <a href="#">39-29-9084</a> | <a href="#">39-28-9088</a> |           |
| 10       | <a href="#">39-30-6107</a> | <a href="#">39-30-6108</a> | <a href="#">39-29-9104</a> | <a href="#">39-28-9108</a> |           |
| 12       | <a href="#">39-30-6127</a> | <a href="#">39-30-6128</a> | <a href="#">39-29-9124</a> | <a href="#">39-28-9128</a> |           |
| 14       | <a href="#">39-30-6147</a> | <a href="#">39-30-6148</a> | <a href="#">39-29-9144</a> | <a href="#">39-28-9148</a> |           |
| 16       | <a href="#">39-30-6167</a> | <a href="#">39-30-6168</a> | <a href="#">39-29-9164</a> | <a href="#">39-28-9168</a> |           |
| 18       | <a href="#">39-30-6187</a> | <a href="#">39-30-6188</a> | <a href="#">39-29-9184</a> | <a href="#">39-28-9188</a> |           |
| 20       | <a href="#">39-30-6207</a> | <a href="#">39-30-6208</a> | <a href="#">39-29-9204</a> | <a href="#">39-28-9208</a> |           |
| 22       | <a href="#">39-30-6227</a> | <a href="#">39-30-6228</a> | <a href="#">39-29-9224</a> |                            |           |
| 24       | <a href="#">39-30-6247</a> | <a href="#">39-30-6248</a> | <a href="#">39-29-9244</a> | <a href="#">39-28-9248</a> |           |

## 4.20mm (.165") Pitch Mini-Fit Jr.™ Header

**5566**

**Vertical, Dual Row  
Without Pegs, without Drain Holes**



### Features and Benefits

- Positive housing locks to mate with Mini-Fit Jr. receptacle
- Fully isolated terminals to protect contacts from damage
- Drain hole option available, contact Molex

### Reference Information

Packaging: Bag  
UL File No.: E29179  
CSA File No.: LR19980  
TUV License No.: R75142  
Mates With: 5557 dual row receptacles  
PCB Thickness: 1.60mm (.062")  
Process: Wave solder  
Designed In: Millimeters

### Electrical

Voltage: 600V  
Current: (Used with 16 AWG)

| Series | Circuits |      |      |       |
|--------|----------|------|------|-------|
|        | 2-3      | 4-6  | 7-10 | 12-24 |
| 46083  | 9.0A     | 8.0A | 7.0A | 6.0A  |

Contact Resistance: 10 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 1000 Megohms min.

### Mechanical

Insertion Force to PCB: 5.0kg max.  
Durability: 30 cycles

### Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0  
Contact: Brass or Phosphor Bronze  
Plating: Tin  
Underplating: Copper  
Operating Temperature: -40 to +105°C

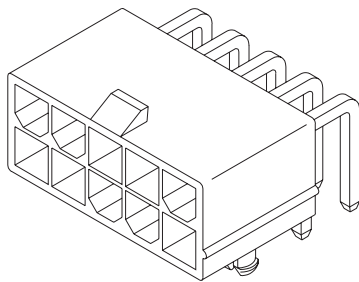
| Circuits | Order No.                  |                            | Lead-free |
|----------|----------------------------|----------------------------|-----------|
|          | 94V-2                      | 94V-0                      |           |
| 2        | <a href="#">39-28-1023</a> | <a href="#">39-28-8020</a> | Yes       |
| 4        | <a href="#">39-28-1043</a> | <a href="#">39-28-8040</a> |           |
| 6        | <a href="#">39-28-1063</a> | <a href="#">39-28-8060</a> |           |
| 8        | <a href="#">39-28-1083</a> | <a href="#">39-28-8080</a> |           |
| 10       | <a href="#">39-28-1103</a> | <a href="#">39-28-8100</a> |           |
| 12       | <a href="#">39-28-1123</a> | <a href="#">39-28-8120</a> |           |

| Circuits | Order No.                  |                            | Lead-free |
|----------|----------------------------|----------------------------|-----------|
|          | 94V-2                      | 94V-0                      |           |
| 14       | <a href="#">39-28-1143</a> | <a href="#">39-28-8140</a> | Yes       |
| 16       | <a href="#">39-28-1163</a> | <a href="#">39-28-8160</a> |           |
| 18       | <a href="#">39-28-1183</a> | <a href="#">39-28-8180</a> |           |
| 20       | <a href="#">39-28-1203</a> | <a href="#">39-28-8200</a> |           |
| 22       | <a href="#">39-28-1223</a> | <a href="#">39-28-8220</a> |           |
| 24       | <a href="#">39-28-1243</a> | <a href="#">39-28-8240</a> |           |

## 4.20mm (.165") Pitch Mini-Fit Jr.™ Header

**5569**

**Right Angle, Dual Row with Pegs**



### Features and Benefits

- Board mounting pegs provide polarization during placement on PCB and increased board retention during solder processing
- Low profile for space constraints
- Positive housing locks
- Fully isolated terminals to protect contacts from damage

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: LR19980  
TUV License No.: R75142  
Mates With: 5557 dual row receptacles  
PCB Thickness: 1.60mm (.062")  
Process: Wave Solder  
Designed In: Millimeters

### Electrical

Voltage: 600V  
Current: (Used with 16 AWG)

| Series | Circuits |       |       |       |
|--------|----------|-------|-------|-------|
|        | 2-3      | 4-6   | 7-10  | 12-24 |
| 46083  | 9.0A     | 8.0A  | 7.0A  | 6.0A  |
| 45750  | 12.0A    | 12.0A | 12.0A | 11.0A |

Contact Resistance: 10 milliohms max.  
Dielectric Withstanding Voltage: 1500V AC  
Insulation Resistance: 1000 Megohms min.

### Mechanical

Insertion Force to PCB: 5.0kg max.  
Durability: 30 cycles

### Physical

Housing: 6/6 nylon, UL 94V-2 or 94V-0  
Contact: Brass  
Plating: Tin or Select Gold  
Underplating: Nickel  
Operating Temperature: -40 to +105°C

| Circuits | Order No.                  |                            |                            |                            | Lead-free |
|----------|----------------------------|----------------------------|----------------------------|----------------------------|-----------|
|          | Tin Plated                 |                            | Select Gold Plated (30µ")  |                            |           |
|          | 94V-2                      | 94V-0                      | 94V-2                      | 94V-0                      |           |
| 2        | <a href="#">39-30-7025</a> | <a href="#">39-30-7026</a> | <a href="#">39-30-0023</a> | <a href="#">39-30-0024</a> | Yes       |
| 4        | <a href="#">39-30-7045</a> | <a href="#">39-30-7046</a> | <a href="#">39-30-0043</a> | <a href="#">39-30-0044</a> |           |
| 6        | <a href="#">39-30-7065</a> | <a href="#">39-30-7066</a> | <a href="#">39-30-0063</a> | <a href="#">39-30-0064</a> |           |
| 8        | <a href="#">39-30-7085</a> | <a href="#">39-30-7086</a> | <a href="#">39-30-0083</a> | <a href="#">39-30-0084</a> |           |
| 10       | <a href="#">39-30-7105</a> | <a href="#">39-30-7106</a> | <a href="#">39-30-0103</a> | <a href="#">39-30-0104</a> |           |
| 12       | <a href="#">39-30-7125</a> | <a href="#">39-30-7126</a> | <a href="#">39-30-0123</a> | <a href="#">39-30-0124</a> |           |
| 14       | <a href="#">39-30-7145</a> | <a href="#">39-30-7146</a> | <a href="#">39-30-0143</a> | <a href="#">39-30-0144</a> |           |
| 16       | <a href="#">39-30-7165</a> | <a href="#">39-30-7166</a> | <a href="#">39-30-0163</a> | <a href="#">39-30-0164</a> |           |
| 18       | <a href="#">39-30-7185</a> |                            | <a href="#">39-30-0183</a> |                            |           |
| 20       | <a href="#">39-30-7205</a> | <a href="#">39-30-7206</a> | <a href="#">39-30-0203</a> | <a href="#">39-30-0204</a> |           |
| 22       | <a href="#">39-30-7225</a> |                            |                            |                            |           |
| 24       | <a href="#">39-30-7245</a> | <a href="#">39-30-7246</a> | <a href="#">39-30-0243</a> | <a href="#">39-30-0244</a> |           |



# PRODUCT SPECIFICATION

## MINI-FIT JR.

### Table of Contents

| <u>Section</u>                                     | <u>Page</u> |
|----------------------------------------------------|-------------|
| 1.0 <u>Scope</u>                                   | 2           |
| 2.0 <u>Product Description</u>                     | 2           |
| 2.1 Names and Series Numbers                       | 2           |
| Table 1 – Wire-To-Board                            | 2           |
| Table 1 – Wire-To-Board                            | 2           |
| 2.2 Dimensions, Materials, Platings, and Markings  | 2           |
| 2.3 Safety Agency Approvals                        | 2           |
| 3.0 <u>Applicable Documents and Specifications</u> | 2           |
| 4.0 <u>Ratings</u>                                 | 3           |
| 4.1 Voltage                                        | 3           |
| 4.2 Applicable Wires                               | 3           |
| 4.3 Maximum Current Rating (Amperes)               | 3           |
| Table 3 – Wire-To-Wire and Wire-To-Board           | 3           |
| 4.4 Temperature                                    | 3           |
| 4.5 Wave Solder Process Temperature                | 3           |
| 5.0 <u>Wire-To-Wire Performance</u>                | 4           |
| 5.1 Electrical Requirements                        | 4           |
| 5.2 Mechanical Requirements                        | 4           |
| 5.3 Environmental Requirements                     | 6           |
| 6.0 <u>Wire-To-Board Performance</u>               | 7           |
| 6.1 Electrical Requirements                        | 7           |
| 6.2 Mechanical Requirements                        | 7           |
| 6.3 Environmental Requirements                     | 9           |
| 7.0 <u>Test Sequences</u>                          | 9           |
| 8.0 <u>Packaging</u>                               | 9           |

|                                        |                                                                                   |                                                                                  |                               |
|----------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------|
| REVISION:<br><b>E</b>                  | ECR/ECN INFORMATION:<br>EC No: <b>UCP2007-1117</b><br>DATE: <b>2006 / 10 / 31</b> | TITLE:<br><b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | SHEET No.<br><b>1 of 9</b>    |
| DOCUMENT NUMBER:<br><b>PS-5556-001</b> | CREATED / REVISED BY:<br><b>LSCHMIDT</b>                                          | CHECKED BY:<br><b>JBELL</b>                                                      | APPROVED BY:<br><b>FSMITH</b> |



# PRODUCT SPECIFICATION

## 1.0 SCOPE

This Product Specification covers performance requirements for the MINI-FIT JR. 4.20 mm (.165 inch) centerline (pitch) printed circuit board (PCB) connector series with Tin or Gold plating, and The MINI-FIT JR. connector series terminated with 16 to 28 AWG wire using Crimp technology with Tin or Gold plating.

## 2.0 PRODUCT DESCRIPTION

### 2.1 PRODUCT NAME AND SERIES NUMBER (S)

| Table 1 – WIRE-TO-WIRE |               |      |     |     |     |
|------------------------|---------------|------|-----|-----|-----|
| Description            | Series Number | RoHS | UL  | CSA | TUV |
| Female Crimp Terminal  | 5556          | Yes  | n/a | n/a | n/a |
| Receptacle Housing     | 5557          | Yes  | Yes | Yes | Yes |
| Male Crimp Terminal    | 5558          | Yes  | n/a | n/a | n/a |
| Plug Housing           | 5559          | Yes  | Yes | Yes | Yes |

| Table 2 – WIRE-TO-BOARD |               |      |     |     |     |
|-------------------------|---------------|------|-----|-----|-----|
| Description             | Series Number | RoHS | UL  | CSA | TUV |
| Female Crimp Terminal   | 5556          | Yes  | n/a | n/a | n/a |
| Receptacle Housing      | 5557          | Yes  | Yes | Yes | Yes |
| Vertical Header         | 5566          | Yes  | Yes | Yes | Yes |
| Right Angle Header      | 5569          | Yes  | Yes | Yes | Yes |

### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

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

### 2.3 SAFETY AGENCY APPROVALS

UL File: E29179

CSA Certificate: LR 19980

TUV Certificate: R75142-8

## 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See sales drawings and the other sections of this specification for the necessary referenced documents and specifications.

|                                        |                                                                                   |                                                                                  |                             |
|----------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------|
| REVISION:<br><b>E</b>                  | ECR/ECN INFORMATION:<br>EC No: <b>UCP2007-1117</b><br>DATE: <b>2006 / 10 / 31</b> | TITLE:<br><b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | SHEET No.<br><b>2 of 9</b>  |
| DOCUMENT NUMBER:<br><b>PS-5556-001</b> |                                                                                   | CREATED / REVISED BY:<br><b>LSCHMIDT</b>                                         | CHECKED BY:<br><b>JBELL</b> |
|                                        |                                                                                   | APPROVED BY:<br><b>FSMITH</b>                                                    |                             |



# PRODUCT SPECIFICATION

## 4.0 RATINGS

### 4.1 VOLTAGE

600 Volts AC (RMS) (or 600 Volts DC)

### 4.2 APPLICABLE WIRES

|                                                              |                                          |
|--------------------------------------------------------------|------------------------------------------|
| Maximum Insulation Diameter<br>and<br>Applicable Wire Gauges | 16 AWG: 3.10 mm / .122 inches MAXIMUM    |
|                                                              | 18-24 AWG: 3.10 mm / .122 inches MAXIMUM |
|                                                              | 22-28 AWG: 1.80 mm / .071 inches MAXIMUM |

### 4.3 MAXIMUM CURRENT RATING (Amperes)

| Table 3 - MAXIMUM CURRENT RATING (Amperes) |       |       |        |         |                  |       |       |        |         |
|--------------------------------------------|-------|-------|--------|---------|------------------|-------|-------|--------|---------|
| Brass                                      |       |       |        |         | Phosphor Bronze  |       |       |        |         |
| Wire \ Ckt. Size                           | 2 & 3 | 4 - 6 | 7 - 10 | 12 - 24 | Wire \ Ckt. Size | 2 & 3 | 4 - 6 | 7 - 10 | 12 - 24 |
| AWG #16                                    | 9     | 8     | 7      | 6       | AWG #16          | 8     | 7     | 6      | 5       |
| AWG #18                                    | 9     | 8     | 7      | 6       | AWG #18          | 8     | 7     | 6      | 5       |
| AWG #20                                    | 7     | 6     | 5      | 5       | AWG #20          | 6     | 5     | 4      | 4       |
| AWG #22                                    | 5     | 4     | 4      | 4       | AWG #22          | 4     | 3     | 3      | 3       |
| AWG #24                                    | 4     | 3     | 3      | 3       | AWG #24          | 3     | 2     | 2      | 2       |
| AWG #26                                    | 3     | 2     | 2      | 2       | AWG #26          | 2     | 1     | 1      | 1       |
| AWG #28                                    | 2     | 1     | 1      | 1       | AWG #28          | 1     | 1     | 1      | 1       |

**Note:** PCB trace design may greatly affect temperature rise results in Wire-to-Board Applications.

### 4.4 TEMPERATURE

Operating: \* - 40°C to + 105°C

Nonoperating: - 40°C to + 105°C

*\*Including 30°C terminal temperature at rated current*

### 4.5 WAVE SOLDER PROCESS TEMPERATURE

Headers with pegs: 240°C Maximum

Headers without pegs: 260°C Maximum

|                                        |                                                                                   |                                                                                  |                             |
|----------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------|
| REVISION:<br><b>E</b>                  | ECR/ECN INFORMATION:<br>EC No: <b>UCP2007-1117</b><br>DATE: <b>2006 / 10 / 31</b> | TITLE:<br><b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | SHEET No.<br><b>3 of 9</b>  |
| DOCUMENT NUMBER:<br><b>PS-5556-001</b> |                                                                                   | CREATED / REVISED BY:<br><b>LSCHMIDT</b>                                         | CHECKED BY:<br><b>JBELL</b> |
|                                        |                                                                                   | APPROVED BY:<br><b>FSMITH</b>                                                    |                             |



# PRODUCT SPECIFICATION

## 5.0 WIRE-TO-WIRE PERFORMANCE

### 5.1 ELECTRICAL REQUIREMENTS

| ITEM | DESCRIPTION                                        | TEST CONDITION                                                                                                                                                                                             | REQUIREMENT                             |
|------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1    | Contact Resistance (Low Level)                     | Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA. Wire resistance shall be removed from the measured value.                                                                       | 10 milliohms<br>MAXIMUM<br>[initial]    |
| 2    | Contact Resistance @ Rated Current                 | Mate connectors: apply a maximum voltage of 20 mV at rated current.                                                                                                                                        | 10 milliohms<br>MAXIMUM<br>[initial]    |
| 3    | Contact Resistance of Wire Termination (Low Level) | Terminate the applicable wire to the terminal and measure wire using a voltage of 20 mV and a current of 100 mA.                                                                                           | 5 milliohms<br>MAXIMUM<br>[initial]     |
| 4    | Insulation Resistance                              | Mate connectors: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground.                                                                                                    | 1000 Megohms<br>MINIMUM                 |
| 5    | Dielectric Withstanding Voltage                    | Mate connectors: apply a voltage of 1500 VAC for 1 minute between adjacent terminals and between terminals to ground.                                                                                      | No breakdown.<br>Current leakage < 5 mA |
| 6    | Temperature Rise (via Current Cycling)             | Mate connectors. Measure the temperature rise at the rated current after 96 hours, during current cycling (45 minutes ON and 15 minutes OFF per hour) for 240 hours, and after final 96-hour steady state. | Temperature rise:<br>+30°C MAXIMUM      |

### 5.2 MECHANICAL REQUIREMENTS

| ITEM | DESCRIPTION                                 | TEST CONDITION                                                                                          | REQUIREMENT                                                                                         |
|------|---------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 1    | Terminal Mate and Unmate Forces Per Circuit | Insert and withdraw terminal (male to female) at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.           | 14.7 N (3.30 lbf)<br>MAXIMUM insertion force<br>and<br>0.5 N (0.11 lbf)<br>MINIMUM withdrawal force |
| 2    | Crimp Terminal Retention Force (in Housing) | Axial pullout force on the terminal in the housing at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.      | 30 N (6.74 lbf)<br>MINIMUM retention force                                                          |
| 3    | Durability                                  | Mate connectors up to 30 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests. | 20 milliohms MAXIMUM                                                                                |

|                    |                                             |                                                                        |               |
|--------------------|---------------------------------------------|------------------------------------------------------------------------|---------------|
| REVISION:          | ECR/ECN INFORMATION:                        | TITLE:                                                                 | SHEET No.     |
| <b>E</b>           | EC No: UCP2007-1117<br>DATE: 2006 / 10 / 31 | <b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | <b>4 of 9</b> |
| DOCUMENT NUMBER:   | CREATED / REVISED BY:                       | CHECKED BY:                                                            | APPROVED BY:  |
| <b>PS-5556-001</b> | <b>LSCHMIDT</b>                             | <b>JBELL</b>                                                           | <b>FSMITH</b> |



# PRODUCT SPECIFICATION

## 5.2 MECHANICAL REQUIREMENTS (continued)

| ITEM | DESCRIPTION                                         | TEST CONDITION                                                                                                                       | REQUIREMENT                                                                                                                                                                                                                                       |                               |
|------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 4    | Vibration<br>(Random)                               | Mate connectors and vibrate per EIA 364-28, test condition VII.                                                                      | 10 milliohms MAXIMUM<br>(change from initial)<br>and<br>Discontinuity < 1 microsecond                                                                                                                                                             |                               |
| 5    | Shock<br>(Mechanical)                               | Mate connectors and shock at 50 g's with ½ sine wave (11 milliseconds) shocks in the ±X, ±Y, ±Z axes, (18 shocks total).             | 20 milliohms MAXIMUM<br>and<br>Discontinuity < 1 microsecond                                                                                                                                                                                      |                               |
| 6    | Wire<br>Pullout Force<br>(Axial)                    | Apply an axial pullout force on the wire at a rate of 25 ± 6 mm (1 ± ¼ inch).                                                        | 16 Awg = 88.0 N (19.8 lbf) Min.<br>18 Awg = 88.0 N (19.8 lbf) Min.<br>20 Awg = 59.0 N (13.3 lbf) Min.<br>22 Awg = 39.0 N (8.78 lbf) Min.<br>24 Awg = 29.0 N (6.52 lbf) Min.<br>26 Awg = 19.0 N (4.27 lbf) Min.<br>28 Awg = 9.80 N (2.20 lbf) Min. |                               |
| 7    | Crimp Terminal<br>Insertion Force<br>(into Housing) | Apply an axial insertion force on the terminal at a rate of 25 ± 6 mm (1 ± ¼ inch).                                                  | 15.0 N (3.37 lbf)<br>MAXIMUM insertion force                                                                                                                                                                                                      |                               |
| 8    | Normal<br>Force                                     | Apply a perpendicular force.                                                                                                         | Sn                                                                                                                                                                                                                                                | 1.47 N (150 grams)<br>MINIMUM |
|      |                                                     |                                                                                                                                      | Au                                                                                                                                                                                                                                                | 0.49 N (50 grams)<br>MINIMUM  |
| 9    | Panel Insertion and<br>Withdrawl Forces             | Insert and withdraw a connector at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute. (Applies only to plugs with panel retention feature) | 225 N (50.7 lbf)<br>MAXIMUM insertion force<br>and<br>157 N (35.3 lbf) MINIMUM<br>withdrawl force                                                                                                                                                 |                               |
| 10   | Thumb latch<br>Operation Force                      | Depress latch at a speed rate of 25 ± 6 mm (1 ± ¼ inch) per minute.                                                                  | 16.67 N (3.75 lbf) MAXIMUM                                                                                                                                                                                                                        |                               |
| 11   | Thumb latch Yield<br>Strength                       | Mate loaded connectors fully. Pull apart via wires at a speed rate of 25 ± 6 mm (1 ± ¼ inch) per minute.                             | 68 N (15.3 lbf) MINIMUM                                                                                                                                                                                                                           |                               |

|                    |                                             |                                                                        |               |
|--------------------|---------------------------------------------|------------------------------------------------------------------------|---------------|
| REVISION:          | ECR/ECN INFORMATION:                        | TITLE:                                                                 | SHEET No.     |
| <b>E</b>           | EC No: UCP2007-1117<br>DATE: 2006 / 10 / 31 | <b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | <b>5 of 9</b> |
| DOCUMENT NUMBER:   | CREATED / REVISED BY:                       | CHECKED BY:                                                            | APPROVED BY:  |
| <b>PS-5556-001</b> | <b>LSCHMIDT</b>                             | <b>JBELL</b>                                                           | <b>FSMITH</b> |



# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL REQUIREMENTS

| ITEM | DESCRIPTION                                                                  | TEST CONDITION                                                                                                                                                | REQUIREMENT                                                                                                   |
|------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 1    | <b>Thermal Shock</b>                                                         | Mate connectors: expose for 5 cycles<br>Between temperatures $-55$ and $105^{\circ}\text{C}$ ;<br>Dwell 0.5 hours at each temperature.                        | 20 milliohms MAXIMUM<br>Visual: No Damage<br>Dielectric Strength per 5.1.5<br>Insulation Resistance per 5.1.4 |
| 2    | <b>Thermal Aging</b>                                                         | Mate connectors; expose to:<br>96 hours at $105 \pm 2^{\circ}\text{C}$                                                                                        | 20 milliohms MAXIMUM<br>and<br>Visual: No Damage                                                              |
| 3    | <b>Humidity<br/>(Steady State)</b>                                           | Mate connectors: expose to a<br>temperature of $60 \pm 2^{\circ}\text{C}$ with a relative<br>humidity of 90-95% for 96 hours.                                 | 20 milliohms MAXIMUM<br>Visual: No Damage<br>Dielectric Strength per 5.1.5<br>Insulation Resistance per 5.1.4 |
| 4    | <b>Cold Resistance</b>                                                       | Mate connectors:<br>Duration: 96 hours;<br>Temperature: $-40 \pm 3^{\circ}\text{C}$                                                                           | 20 milliohms MAXIMUM<br>and<br>Visual: No Damage                                                              |
| 5    | <b>Corrosive<br/>Atmosphere: Sulfur<br/>Dioxide Gas<br/>(SO<sub>2</sub>)</b> | Mate connectors:<br>Duration: 24 hours exposure.<br>Atmosphere: 50 parts per million (ppm)<br>SO <sub>2</sub> Gas.<br>Temperature: $40 \pm 3^{\circ}\text{C}$ | 20 milliohms MAXIMUM<br>and<br>Visual: No Damage                                                              |

|                    |                                                           |                                                                        |               |
|--------------------|-----------------------------------------------------------|------------------------------------------------------------------------|---------------|
| REVISION:          | ECR/ECN INFORMATION:                                      | TITLE:                                                                 | SHEET No.     |
| <b>E</b>           | EC No: <b>UCP2007-1117</b><br>DATE: <b>2006 / 10 / 31</b> | <b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | <b>6 of 9</b> |
| DOCUMENT NUMBER:   | CREATED / REVISED BY:                                     | CHECKED BY:                                                            | APPROVED BY:  |
| <b>PS-5556-001</b> | <b>LSCHMIDT</b>                                           | <b>JBELL</b>                                                           | <b>FSMITH</b> |



# PRODUCT SPECIFICATION

## 6.0 WIRE-TO-BOARD PERFORMANCE

### 6.1 ELECTRICAL REQUIREMENTS

| ITEM | DESCRIPTION                                        | TEST CONDITION                                                                                                                                                                                             | REQUIREMENT                             |
|------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1    | Contact Resistance (Low Level)                     | Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA. Wire resistance shall be removed from the measured value.                                                                       | 10 milliohms<br>MAXIMUM<br>[initial]    |
| 2    | Contact Resistance @ Rated Current                 | Mate connectors: apply a maximum voltage of 20 mV at rated current.                                                                                                                                        | 10 milliohms<br>MAXIMUM<br>[initial]    |
| 3    | Contact Resistance of Wire Termination (Low Level) | Terminate the applicable wire to the terminal and measure wire using a voltage of 20 mV and a current of 100 mA.                                                                                           | 5 milliohms<br>MAXIMUM<br>[initial]     |
| 4    | Insulation Resistance                              | Mate connectors: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground.                                                                                                    | 1000 Megohms<br>MINIMUM                 |
| 5    | Dielectric Withstanding Voltage                    | Mate connectors: apply a voltage of 1500 VAC for 1 minute between adjacent terminals and between terminals to ground.                                                                                      | No breakdown.<br>Current leakage < 5 mA |
| 6    | Temperature Rise (via Current Cycling)             | Mate connectors. Measure the temperature rise at the rated current after 96 hours, during current cycling (45 minutes ON and 15 minutes OFF per hour) for 240 hours, and after final 96-hour steady state. | Temperature rise:<br>+30°C MAXIMUM      |

### 6.2 MECHANICAL REQUIREMENTS

| ITEM | DESCRIPTION                                 | TEST CONDITION                                                                                          | REQUIREMENT                                                                                         |
|------|---------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 1    | Terminal Mate and Unmate Forces Per Circuit | Insert and withdraw terminal (male to female) at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.           | 14.7 N (3.30 lbf)<br>MAXIMUM insertion force<br>and<br>0.5 N (0.11 lbf)<br>MINIMUM withdrawal force |
| 2    | Crimp Terminal Retention Force (in Housing) | Axial pullout force on the terminal in the housing at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.      | 30 N (6.74 lbf)<br>MINIMUM retention force                                                          |
| 3    | Durability                                  | Mate connectors up to 30 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests. | 20 milliohms MAXIMUM                                                                                |

|                  |                                             |                                                               |              |
|------------------|---------------------------------------------|---------------------------------------------------------------|--------------|
| REVISION:        | ECR/ECN INFORMATION:                        | TITLE:                                                        | SHEET No.    |
| E                | EC No: UCP2007-1117<br>DATE: 2006 / 10 / 31 | PRODUCT SPECIFICATION FOR<br>MINI-FIT JR.<br>CONNECTOR SYSTEM | 7 of 9       |
| DOCUMENT NUMBER: | CREATED / REVISED BY:                       | CHECKED BY:                                                   | APPROVED BY: |
| PS-5556-001      | LSCHMIDT                                    | JBELL                                                         | FSMITH       |



# PRODUCT SPECIFICATION

| ITEM | DESCRIPTION                                         | TEST CONDITION                                                                                                                      | REQUIREMENT                                                                                                                                                                                                                                       |                               |
|------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 4    | Vibration<br>(Random)                               | Mate connectors and vibrate per EIA 364-28, test condition VII.                                                                     | 10 milliohms MAXIMUM<br>(change from initial)<br>and<br>Discontinuity < 1 microsecond                                                                                                                                                             |                               |
| 5    | Shock<br>(Mechanical)                               | Mate connectors and shock at 50 g's with ½ sine wave (11 milliseconds) shocks in the ±X, ±Y, ±Z axes, (18 shocks total).            | 20 milliohms MAXIMUM<br>and<br>Discontinuity < 1 microsecond                                                                                                                                                                                      |                               |
| 6    | Wire<br>Pullout Force<br>(Axial)                    | Apply an axial pullout force on the wire at a rate of 25 ± 6 mm (1 ± ¼ inch).                                                       | 16 Awg = 88.0 N (19.8 lbf) Min.<br>18 Awg = 88.0 N (19.8 lbf) Min.<br>20 Awg = 59.0 N (13.3 lbf) Min.<br>22 Awg = 39.0 N (8.78 lbf) Min.<br>24 Awg = 29.0 N (6.52 lbf) Min.<br>26 Awg = 19.0 N (4.27 lbf) Min.<br>28 Awg = 9.80 N (2.20 lbf) Min. |                               |
| 7    | Crimp Terminal<br>Insertion Force<br>(into Housing) | Apply an axial insertion force on the terminal at a rate of 25 ± 6 mm (1 ± ¼ inch).                                                 | 15.0 N (3.37 lbf)<br>MAXIMUM insertion force                                                                                                                                                                                                      |                               |
| 8    | Normal<br>Force                                     | Apply a perpendicular force.                                                                                                        | Sn                                                                                                                                                                                                                                                | 1.47 N (150 grams)<br>MINIMUM |
|      |                                                     |                                                                                                                                     | Au                                                                                                                                                                                                                                                | 0.49 N (50 grams)<br>MINIMUM  |
| 9    | PCB Engagement<br>and<br>Separation Forces          | Engage and separate a connector at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute. (Applies to parts with PCB retention features only) | 49.0 N (11.0 lbf)<br>MAXIMUM insertion force<br>and<br>10.0 N (2.24 lbf)<br>MINIMUM withdrawal force                                                                                                                                              |                               |
| 10   | Pin Retention Force                                 | Apply axial push force at the speed rate of 25 ± 3mm/minute.                                                                        | 9.81 N (2.20 lbf) MAXIMUM                                                                                                                                                                                                                         |                               |
| 11   | Thumblatch<br>Operation Force                       | Depress latch at a speed rate of 25 ± 6 mm (1 ± ¼ inch) per minute.                                                                 | 16.67 N (3.75 lbf) MAXIMUM                                                                                                                                                                                                                        |                               |
| 12   | Thumblatch Yield<br>Strength                        | Mate loaded connectors fully. Pull apart via wires at a speed rate of 25 ± 6 mm (1 ± ¼ inch) per minute.                            | 68 N (15.3 lbf) MINIMUM                                                                                                                                                                                                                           |                               |

|                    |                                             |                                                                        |               |
|--------------------|---------------------------------------------|------------------------------------------------------------------------|---------------|
| REVISION:          | ECR/ECN INFORMATION:                        | TITLE:                                                                 | SHEET No.     |
| <b>E</b>           | EC No: UCP2007-1117<br>DATE: 2006 / 10 / 31 | <b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | <b>8 of 9</b> |
| DOCUMENT NUMBER:   | CREATED / REVISED BY:                       | CHECKED BY:                                                            | APPROVED BY:  |
| <b>PS-5556-001</b> | <b>LSCHMIDT</b>                             | <b>JBELL</b>                                                           | <b>FSMITH</b> |



# PRODUCT SPECIFICATION

## 6.3 ENVIRONMENTAL REQUIREMENTS

| ITEM | DESCRIPTION                                                                  | TEST CONDITION                                                                                                                                                | REQUIREMENT                                                                                                   |
|------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 1    | <b>Thermal Shock</b>                                                         | Mate connectors: expose for 5 cycles<br>Between temperatures $-55$ and $105^{\circ}\text{C}$ ;<br>Dwell 0.5 hours at each temperature.                        | 20 milliohms MAXIMUM<br>Visual: No Damage<br>Dielectric Strength per 6.1.5<br>Insulation Resistance per 6.1.4 |
| 2    | <b>Thermal Aging</b>                                                         | Mate connectors; expose to:<br>96 hours at $105 \pm 2^{\circ}\text{C}$                                                                                        | 20 milliohms MAXIMUM<br>and<br>Visual: No Damage                                                              |
| 3    | <b>Humidity<br/>(Steady State)</b>                                           | Mate connectors: expose to a temperature<br>of $60 \pm 2^{\circ}\text{C}$ with a relative humidity of 90-<br>95% for 96 hours.                                | 20 milliohms MAXIMUM<br>Visual: No Damage<br>Dielectric Strength per 6.1.5<br>Insulation Resistance per 6.1.4 |
| 4    | <b>Solderability</b>                                                         | Per SMES-152                                                                                                                                                  | Solder coverage:<br>95% MINIMUM<br>(per SMES-152)                                                             |
| 5    | <b>Solder<br/>Resistance</b>                                                 | Dip connector terminals tail in solder:<br>Solder Duration: $5 \pm 0.5$ seconds;<br>Solder Temperature: $260 \pm 5^{\circ}\text{C}$                           | Visual:<br>No Damage to insulator<br>material                                                                 |
| 6    | <b>Cold Resistance</b>                                                       | Mate connectors:<br>Duration; 96 hours;<br>Temperature: $-40 \pm 3^{\circ}\text{C}$                                                                           | 20 milliohms MAXIMUM<br>and<br>Visual: No Damage                                                              |
| 7    | <b>Corrosive<br/>Atmosphere: Sulfur<br/>Dioxide Gas<br/>(SO<sub>2</sub>)</b> | Mate connectors:<br>Duration; 24 hours exposure.<br>Atmosphere: 50 parts per million (ppm) SO <sub>2</sub><br>Gas.<br>Temperature: $40 \pm 3^{\circ}\text{C}$ | 20 milliohms MAXIMUM<br>and<br>Visual: No Damage                                                              |

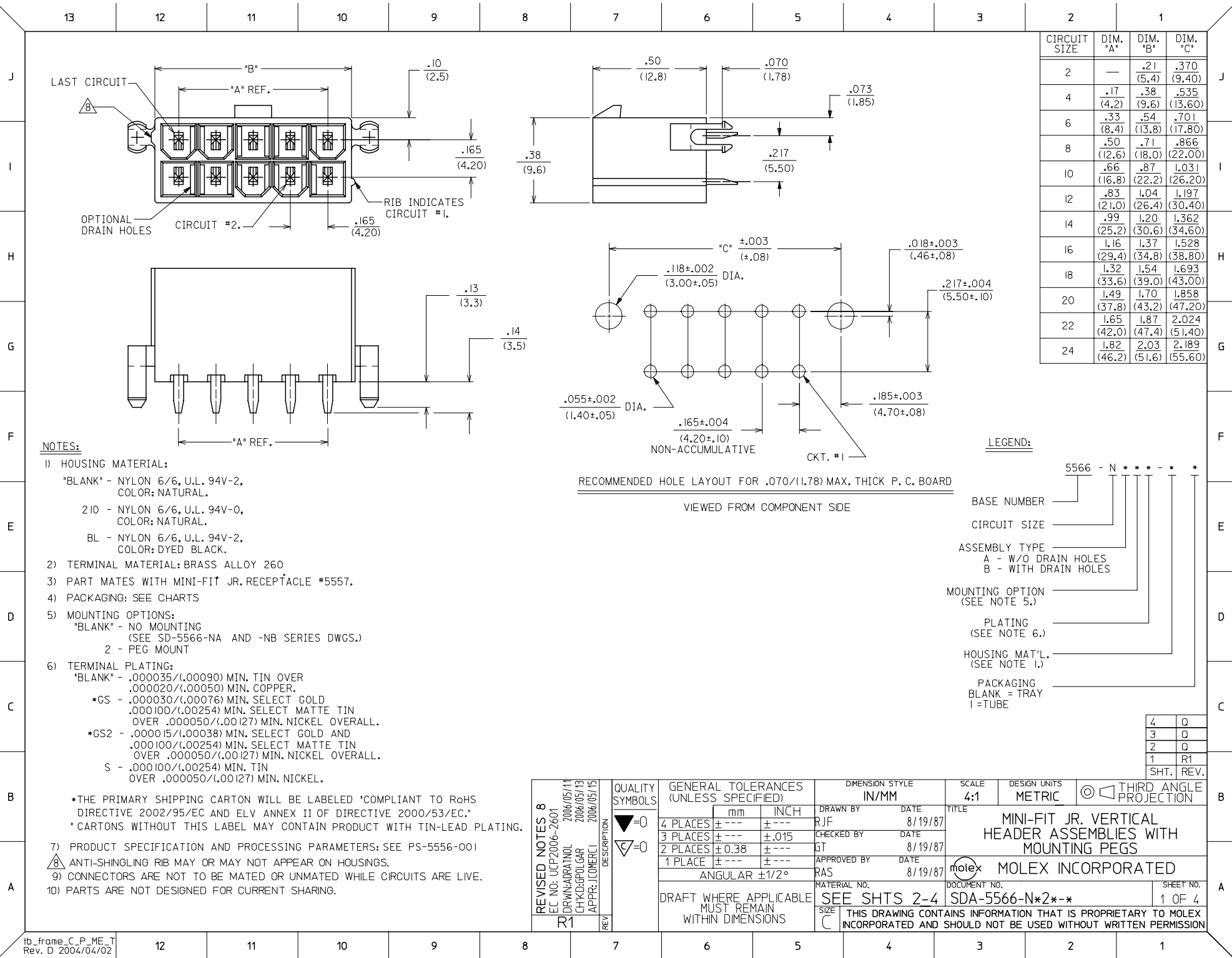
## 7.0 TEST SEQUENCES

Testing sequences to be performed in accordance with EIA-364-1000.01

## 8.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

|                    |                                                           |                                                                        |               |
|--------------------|-----------------------------------------------------------|------------------------------------------------------------------------|---------------|
| REVISION:          | ECR/ECN INFORMATION:                                      | TITLE:                                                                 | SHEET No.     |
| <b>E</b>           | EC No: <b>UCP2007-1117</b><br>DATE: <b>2006 / 10 / 31</b> | <b>PRODUCT SPECIFICATION FOR<br/>MINI-FIT JR.<br/>CONNECTOR SYSTEM</b> | <b>9 of 9</b> |
| DOCUMENT NUMBER:   | CREATED / REVISED BY:                                     | CHECKED BY:                                                            | APPROVED BY:  |
| <b>PS-5556-001</b> | <b>LSCHMIDT</b>                                           | <b>JBELL</b>                                                           | <b>FSMITH</b> |



|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|------------|----------------|------------|-------------------------|--|----|------------|----------------|----------------|-------------------------|--|---|------------|----------------|--------------|-------------------------|--|---|------------|------------------|------------------|-------------------------|--|---|--|---|--|
|            | 13             |            | 12                      |  | 11 |            | 10             |                | 9                       |  | 8 |            | 7              |              | 6                       |  | 5 |            | 4                |                  | 3                       |  | 2 |  | 1 |  |
| J          | PLATING:       |            | 35 M.I. TIN             |  |    |            | PLATING:       |                | 35 M.I. TIN             |  |   |            | PLATING:       |              | 30 M.I. GOLD            |  |   |            | PLATING:         |                  | 30 M.I. GOLD            |  |   |  |   |  |
|            | DRAIN HOLES:   |            | WITHOUT DRAIN HOLES     |  |    |            | DRAIN HOLES:   |                | WITHOUT DRAIN HOLES     |  |   |            | DRAIN HOLES:   |              | WITHOUT DRAIN HOLES     |  |   |            | DRAIN HOLES:     |                  | WITHOUT DRAIN HOLES     |  |   |  |   |  |
|            | MTG. OPTION:   |            | WITH PEGS               |  |    |            | MTG. OPTION:   |                | WITH PEGS               |  |   |            | MTG. OPTION:   |              | WITH PEGS               |  |   |            | MTG. OPTION:     |                  | WITH PEGS               |  |   |  |   |  |
|            | HOUSING MAT'L: |            | NYLON 6/6 94V-2 NATURAL |  |    |            | HOUSING MAT'L: |                | NYLON 6/6 94V-0 NATURAL |  |   |            | HOUSING MAT'L: |              | NYLON 6/6 94V-2 NATURAL |  |   |            | HOUSING MAT'L:   |                  | NYLON 6/6 94V-0 NATURAL |  |   |  |   |  |
| I          | PACKAGING:     |            | TRAY                    |  |    |            | PACKAGING:     |                | TRAY                    |  |   |            | PACKAGING:     |              | TRAY                    |  |   |            | PACKAGING:       |                  | TRAY                    |  |   |  |   |  |
|            | PART NO.       | ENG NO.    | CKTS                    |  |    |            | PART NO.       | ENG NO.        | CKTS                    |  |   |            | PART NO.       | ENG NO.      | CKTS                    |  |   |            | PART NO.         | ENG NO.          | CKTS                    |  |   |  |   |  |
|            | 39-29-9023     | 5566 -02A2 | 2                       |  |    |            | 39-29-9027     | 5566 -02A2-210 | 2                       |  |   |            | 39-29-9025     | 5566 -02A2GS | 2                       |  |   |            | 39-29-9029       | 5566 -02A2GS-210 | 2                       |  |   |  |   |  |
|            | 39-29-9043     | 5566 -04A2 | 4                       |  |    |            | 39-29-9047     | 5566 -04A2-210 | 4                       |  |   |            | 39-29-9045     | 5566 -04A2GS | 4                       |  |   |            | 39-29-9049       | 5566 -04A2GS-210 | 4                       |  |   |  |   |  |
|            | 39-29-9063     | 5566 -06A2 | 6                       |  |    |            | 39-29-9067     | 5566 -06A2-210 | 6                       |  |   |            | 39-29-9065     | 5566 -06A2GS | 6                       |  |   |            | 39-29-9069       | 5566 -06A2GS-210 | 6                       |  |   |  |   |  |
|            | 39-29-9083     | 5566 -08A2 | 8                       |  |    |            | 39-29-9087     | 5566 -08A2-210 | 8                       |  |   |            | 39-29-9085     | 5566 -08A2GS | 8                       |  |   |            | 39-29-9089       | 5566 -08A2GS-210 | 8                       |  |   |  |   |  |
|            | 39-29-9103     | 5566 -10A2 | 10                      |  |    |            | 39-29-9107     | 5566 -10A2-210 | 10                      |  |   |            | 39-29-9105     | 5566 -10A2GS | 10                      |  |   |            | 39-29-9109       | 5566 -10A2GS-210 | 10                      |  |   |  |   |  |
|            | 39-29-9123     | 5566 -12A2 | 12                      |  |    |            | 39-29-9127     | 5566 -12A2-210 | 12                      |  |   |            | 39-29-9125     | 5566 -12A2GS | 12                      |  |   |            | 39-29-9129       | 5566 -12A2GS-210 | 12                      |  |   |  |   |  |
|            | 39-29-9143     | 5566 -14A2 | 14                      |  |    |            | 39-29-9147     | 5566 -14A2-210 | 14                      |  |   |            | 39-29-9145     | 5566 -14A2GS | 14                      |  |   |            | 39-29-9149       | 5566 -14A2GS-210 | 14                      |  |   |  |   |  |
|            | 39-29-9163     | 5566 -16A2 | 16                      |  |    |            | 39-29-9167     | 5566 -16A2-210 | 16                      |  |   |            | 39-29-9165     | 5566 -16A2GS | 16                      |  |   |            | 39-29-9169       | 5566 -16A2GS-210 | 16                      |  |   |  |   |  |
|            | 39-29-9183     | 5566 -18A2 | 18                      |  |    |            | 39-29-9187     | 5566 -18A2-210 | 18                      |  |   |            | 39-29-9185     | 5566 -18A2GS | 18                      |  |   |            | 39-29-9189       | 5566 -18A2GS-210 | 18                      |  |   |  |   |  |
|            | 39-29-9203     | 5566 -20A2 | 20                      |  |    |            | 39-29-9207     | 5566 -20A2-210 | 20                      |  |   |            | 39-29-9205     | 5566 -20A2GS | 20                      |  |   |            | 39-29-9209       | 5566 -20A2GS-210 | 20                      |  |   |  |   |  |
| 39-29-9223 | 5566 -22A2     | 22         |                         |  |    | 39-29-9227 | 5566 -22A2-210 | 22             |                         |  |   | 39-29-9225 | 5566 -22A2GS   | 22           |                         |  |   | 39-29-9229 | 5566 -22A2GS-210 | 22               |                         |  |   |  |   |  |
| 39-29-9243 | 5566 -24A2     | 24         |                         |  |    | 39-29-9247 | 5566 -24A2-210 | 24             |                         |  |   | 39-29-9245 | 5566 -24A2GS   | 24           |                         |  |   | 39-29-9249 | 5566 -24A2GS-210 | 24               |                         |  |   |  |   |  |
|            |                | -          |                         |  |    |            |                | -              |                         |  |   |            |                | -            |                         |  |   |            |                  | -                |                         |  |   |  |   |  |
|            |                | -          |                         |  |    |            |                | -              |                         |  |   |            |                | -            |                         |  |   |            |                  | -                |                         |  |   |  |   |  |
| G          | PLATING:       |            | 35 M.I. TIN             |  |    |            | PLATING:       |                | 35 M.I. TIN             |  |   |            | PLATING:       |              | 30 M.I. GOLD            |  |   |            | PLATING:         |                  | 30 M.I. GOLD            |  |   |  |   |  |
|            | DRAIN HOLES:   |            | WITH DRAIN HOLES        |  |    |            | DRAIN HOLES:   |                | WITH DRAIN HOLES        |  |   |            | DRAIN HOLES:   |              | WITH DRAIN HOLES        |  |   |            | DRAIN HOLES:     |                  | WITH DRAIN HOLES        |  |   |  |   |  |
|            | MTG. OPTION:   |            | WITH PEGS               |  |    |            | MTG. OPTION:   |                | WITH PEGS               |  |   |            | MTG. OPTION:   |              | WITH PEGS               |  |   |            | MTG. OPTION:     |                  | WITH PEGS               |  |   |  |   |  |
|            | HOUSING MAT'L: |            | NYLON 6/6 94V-2 NATURAL |  |    |            | HOUSING MAT'L: |                | NYLON 6/6 94V-0 NATURAL |  |   |            | HOUSING MAT'L: |              | NYLON 6/6 94V-2 NATURAL |  |   |            | HOUSING MAT'L:   |                  | NYLON 6/6 94V-0 NATURAL |  |   |  |   |  |
| F          | PACKAGING:     |            | TRAY                    |  |    |            | PACKAGING:     |                | TRAY                    |  |   |            | PACKAGING:     |              | TRAY                    |  |   |            | PACKAGING:       |                  | TRAY                    |  |   |  |   |  |
|            | PART NO.       | ENG NO.    | CKTS                    |  |    |            | PART NO.       | ENG NO.        | CKTS                    |  |   |            | PART NO.       | ENG NO.      | CKTS                    |  |   |            | PART NO.         | ENG NO.          | CKTS                    |  |   |  |   |  |
|            | 39-29-9022     | 5566 -02B2 | 2                       |  |    |            | 39-29-9026     | 5566 -02B2-210 | 2                       |  |   |            | 39-29-9024     | 5566 -02B2GS | 2                       |  |   |            | 39-28-9028       | 5566 -02B2GS-210 | 2                       |  |   |  |   |  |
|            | 39-29-9042     | 5566 -04B2 | 4                       |  |    |            | 39-29-9046     | 5566 -04B2-210 | 4                       |  |   |            | 39-29-9044     | 5566 -04B2GS | 4                       |  |   |            | 39-28-9048       | 5566 -04B2GS-210 | 4                       |  |   |  |   |  |
|            | 39-29-9062     | 5566 -06B2 | 6                       |  |    |            | 39-29-9066     | 5566 -06B2-210 | 6                       |  |   |            | 39-29-9064     | 5566 -06B2GS | 6                       |  |   |            | 39-28-9068       | 5566 -06B2GS-210 | 6                       |  |   |  |   |  |
|            | 39-29-9082     | 5566 -08B2 | 8                       |  |    |            | 39-29-9086     | 5566 -08B2-210 | 8                       |  |   |            | 39-29-9084     | 5566 -08B2GS | 8                       |  |   |            | 39-28-9088       | 5566 -08B2GS-210 | 8                       |  |   |  |   |  |
|            | 39-29-9102     | 5566 -10B2 | 10                      |  |    |            | 39-29-9106     | 5566 -10B2-210 | 10                      |  |   |            | 39-29-9104     | 5566 -10B2GS | 10                      |  |   |            | 39-28-9108       | 5566 -10B2GS-210 | 10                      |  |   |  |   |  |
|            | 39-29-9122     | 5566 -12B2 | 12                      |  |    |            | 39-29-9126     | 5566 -12B2-210 | 12                      |  |   |            | 39-29-9124     | 5566 -12B2GS | 12                      |  |   |            | 39-28-9128       | 5566 -12B2GS-210 | 12                      |  |   |  |   |  |
|            | 39-29-9142     | 5566 -14B2 | 14                      |  |    |            | 39-29-9146     | 5566 -14B2-210 | 14                      |  |   |            | 39-29-9144     | 5566 -14B2GS | 14                      |  |   |            | 39-28-9148       | 5566 -14B2GS-210 | 14                      |  |   |  |   |  |
|            | 39-29-9162     | 5566 -16B2 | 16                      |  |    |            | 39-29-9166     | 5566 -16B2-210 | 16                      |  |   |            | 39-29-9164     | 5566 -16B2GS | 16                      |  |   |            | 39-28-9168       | 5566 -16B2GS-210 | 16                      |  |   |  |   |  |
|            | 39-29-9182     | 5566 -18B2 | 18                      |  |    |            | 39-29-9186     | 5566 -18B2-210 | 18                      |  |   |            | 39-29-9184     | 5566 -18B2GS | 18                      |  |   |            | 39-28-9188       | 5566 -18B2GS-210 | 18                      |  |   |  |   |  |
|            | 39-29-9202     | 5566 -20B2 | 20                      |  |    |            | 39-29-9206     | 5566 -20B2-210 | 20                      |  |   |            | 39-29-9204     | 5566 -20B2GS | 20                      |  |   |            | 39-28-9208       | 5566 -20B2GS-210 | 20                      |  |   |  |   |  |
| 39-29-9222 | 5566 -22B2     | 22         |                         |  |    | 39-29-9226 | 5566 -22B2-210 | 22             |                         |  |   | 39-29-9224 | 5566 -22B2GS   | 22           |                         |  |   | 39-28-9228 | 5566 -22B2GS-210 | 22               |                         |  |   |  |   |  |
| 39-29-9242 | 5566 -24B2     | 24         |                         |  |    | 39-29-9246 | 5566 -24B2-210 | 24             |                         |  |   | 39-29-9244 | 5566 -24B2GS   | 24           |                         |  |   | 39-28-9248 | 5566 -24B2GS-210 | 24               |                         |  |   |  |   |  |
|            |                | -          |                         |  |    |            |                | -              |                         |  |   |            |                | -            |                         |  |   |            |                  | -                |                         |  |   |  |   |  |
|            |                | -          |                         |  |    |            |                | -              |                         |  |   |            |                | -            |                         |  |   |            |                  | -                |                         |  |   |  |   |  |
| D          |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |
|            |                |            |                         |  |    |            |                |                |                         |  |   |            |                |              |                         |  |   |            |                  |                  |                         |  |   |  |   |  |