Spot-On 1.5 and 2.0 Connector System

The industry’s first SMT potting wire-to-board connector system with improved process capabilities and mechanical reliability protects against water ingress in white goods applications requiring potting treatment

Features and Advantages

- **Retainer**: Provides secure insertion of crimped terminal
- **Positive inner lock**: Offers secure mating retention and prevents wire tangling and latch breakage
- **Fully polarized and color-coded receptacle housing**: Ensures fool-proof mating of the wired assembly
- **Robust center nail**: Reduces stress on SMT solder joints to prevent solder cracking
- **Higher profile plug housing**: Ensures protection from potting material ingress into housing. The maximum potting height is 7.00mm
- **SMT mounting tails**: Automated assembly reduces manual labor processes

Single-Row Connector (8 Circuits)

Single-Row Connector (6 Circuits)

Dual-Row Connector (40 Circuits)

Dual-Row Connector (30 Circuits)
Spot-On 1.5 and 2.0 Connector System

Specifications (Spot-On 1.5, Single Row)

**REFERENCE INFORMATION**
- **Packaging:** Terminal Reel
- **Emboss tape (Header):**
- **Bag (Housing and Retainer):**
- **Use With:** 201650 (Retainer)
- **Designed In:** Millimeters
- **RoHS:** Yes
- **Halogen Free:** No
- **Glow Wire Compliant:** No

**ELECTRICAL**
- **Voltage (max.):** 100V
- **Current (max.):** 2.0A (24 AWG)
- **1.5A (26 AWG) 1.0A (28 AWG)**
- **Contact Resistance (max.):** 20 milliohms
- **Dielectric Withstanding Voltage:** 500V AC / minute
- **Insulation Resistance (min.):** 500 Megohm

**MECHANICAL**
- **Contact Insertion Force (max.):** 9.8N
- **Contact Retention to Housing (min.):** 9.8N
- **Mating Force (max.):** 31N (2 Circuits)
- **Unmating Force (min.):** 0.98N (2 Circuits)
- **Durability (max.):** 30 cycles

**PHYSICAL**
- **Header:** P9T UT 94V-0
- **Housing:** PBT UT 94V-0
- **Retainer:** PBT UT 94V-0
- **Contact:** Copper Alloy

**PLATING:**
- **Contact Area — Tin 1.0 micron min.**
- **Solder Tail Area — Tin 1.0 micron min.**

**Operating Temperature:** -40 to 105°C

Specifications (Spot-On 1.5, Dual Row)

**REFERENCE INFORMATION**
- **Packaging:** Terminal Reel
- **Emboss tape (Header):**
- **Bag (Housing and Retainer):**
- **Use With:** 201649 Terminals (24 to 28 AWG)
- **Designed In:** Millimeters
- **RoHS:** Yes
- **Halogen Free:** No
- **Glow Wire Compliant:** No

**ELECTRICAL**
- **Voltage (max.):** 100V
- **Current (max.):** 2.0A (24 AWG)
- **1.5A (26 AWG) 1.0A (28 AWG)**
- **Contact Resistance (max.):** 20 milliohms
- **Dielectric Withstanding Voltage:** 500V AC / minute
- **Insulation Resistance (min.):** 500 Megohm

**MECHANICAL**
- **Contact Insertion Force (max.):** 9.8N
- **Contact Retention to Housing (min.):** 9.8N
- **Mating Force (max.):** 82N (36 Circuits)
- **Unmating Force (min.):** 17.6N (36 Circuits)
- **Durability (max.):** 30 cycles

**PHYSICAL**
- **Header:** P9T UT 94V-0
- **Housing:** PBT UT 94V-0
- **Retainer:** PBT UT 94V-0
- **Contact:** Copper Alloy

**PLATING:**
- **Contact Area — Tin 1.0 micron min.**
- **Solder Tail Area — Tin 1.0 micron min.**

**Operating Temperature:** -40 to 105°C

Specifications (Spot-On 2.0, Single Row)

**REFERENCE INFORMATION**
- **Packaging:** Terminal Reel
- **Emboss tape (Header):**
- **Bag (Housing and Retainer):**
- **Use With:** 201196 (Retainer)
- **Designed In:** Millimeters
- **RoHS:** Yes
- **Halogen Free:** No
- **Glow Wire Compliant:** No

**ELECTRICAL**
- **Voltage (max.):** 250V
- **Current (max.):** 2.0A (22 AWG)
- **2.0A (24 AWG) 1.5A (26 AWG)**
- **Contact Resistance (max.):** 20 milliohms
- **Dielectric Withstanding Voltage:** 800V AC / minute
- **Insulation Resistance (min.):** 1000 Megohm

**MECHANICAL**
- **Contact Insertion Force (max.):** 9.8N
- **Contact Retention to Housing (min.):** 9.8N
- **Mating Force (max.):** 27.3N (6 Circuits)
- **Unmating Force (min.):** 1.1N (6 Circuits)
- **Durability (max.):** 30 cycles

**PHYSICAL**
- **Header:** P9T UT 94V-0
- **Housing:** PBT UT 94V-0
- **Retainer:** PBT UT 94V-0
- **Contact:** Copper Alloy

**PLATING:**
- **Contact Area — Tin 1.0 micron min.**
- **Solder Tail Area — Tin 1.0 micron min.**

**Operating Temperature:** -40 to 105°C

Specifications (Spot-On 2.0, Dual Row)

**REFERENCE INFORMATION**
- **Packaging:** Terminal Reel
- **Emboss tape (Header):**
- **Bag (Housing and Retainer):**
- **Use With:** 201195 Terminals (22 to 26 AWG)
- **Designed In:** Millimeters
- **RoHS:** Yes
- **Halogen Free:** No
- **Glow Wire Compliant:** No

**ELECTRICAL**
- **Voltage (max.):** 250V
- **Current (max.):** 2.5A (22 AWG)
- **2.0A (24 AWG) 1.5A (26 AWG)**
- **Contact Resistance (max.):** 20 milliohms
- **Dielectric Withstanding Voltage:** 800V AC / minute
- **Insulation Resistance (min.):** 1000 Megohm

**MECHANICAL**
- **Contact Insertion Force (max.):** 9.8N
- **Contact Retention to Housing (min.):** 9.8N
- **Mating Force (max.):** 85N (30 Circuits)
- **Unmating Force (min.):** 7.3N (30 Circuits)
- **Durability (max.):** 30 cycles

**PHYSICAL**
- **Header:** P9T UT 94V-0
- **Housing:** PBT UT 94V-0
- **Retainer:** PBT UT 94V-0
- **Contact:** Copper Alloy

**PLATING:**
- **Contact Area — Tin 1.0 micron min.**
- **Solder Tail Area — Tin 1.0 micron min.**

**Operating Temperature:** -40 to 105°C
Spot-On 1.5 and 2.0 Connector System

Applications

Home Appliance
- Air conditioner
- Refrigerator
- Microwave oven
- Washing machine
- Water heater
- Shower toilet
- Washer/Dryer
- Stove

Telecommunications/Networking
- Hubs
- Servers

Medical
- Patient monitoring

Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Component</th>
<th>Wire Size / Number of rows</th>
<th>Circuits</th>
<th>Housing Colors</th>
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<tbody>
<tr>
<td>201649</td>
<td>Crimp Terminal (Spot-On 1.5)</td>
<td>24 to 28 AWG</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>201647</td>
<td>Receptacle Housing (Spot-On 1.5)</td>
<td>Single row</td>
<td>2 to 5</td>
<td>Natural, Black, Red, Yellow, Blue</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>6 to 16</td>
<td>Natural, Black, Red, Yellow, Blue</td>
</tr>
<tr>
<td>201644</td>
<td>Retainer (Spot-On 1.5)</td>
<td>Dual row</td>
<td>10 to 40</td>
<td>Natural, Black</td>
</tr>
<tr>
<td>201648</td>
<td>Header (Spot-On 1.5)</td>
<td>Single row</td>
<td>2 to 5s</td>
<td>Natural, Black, Red, Yellow, Blue</td>
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<tr>
<td>201645</td>
<td></td>
<td>Single row</td>
<td>6 to 16</td>
<td>Natural, Black, Red, Yellow, Blue</td>
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<tr>
<td>201646</td>
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<td>Dual row w/o nail</td>
<td>10 to 40</td>
<td>Natural, Black</td>
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<tr>
<td>201195</td>
<td>Crimp terminal (Spot-On 2.0)</td>
<td>22 to 26 AWG</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>201200</td>
<td>Receptacle Housing (Spot-On 2.0)</td>
<td>Single row</td>
<td>2 to 16</td>
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<tr>
<td>201196</td>
<td>Retainer (Spot-On 2.0)</td>
<td>Dual row</td>
<td>10 to 40</td>
<td>Natural, Black, Red, Yellow, Blue</td>
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<tr>
<td>201201</td>
<td>Header (Spot-On 2.0)</td>
<td>Single row</td>
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<tr>
<td>201197</td>
<td></td>
<td>Dual row</td>
<td>10 to 40</td>
<td>Natural, Black, Red, Yellow, Blue</td>
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</tbody>
</table>

www.molex.com/link/spot-on.html

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